The Builder.

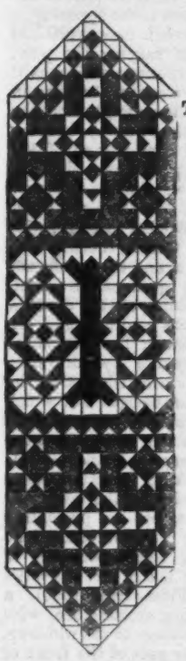
Vol. XXXIII. No. 1682. SATURDAY, MAY 8, 1875.

ILLUSTRATIONS.

Plans of a Fortress 411
Proposed Monument to Bishop Wilberforce in Winchester Cathedral.—Sir G. G. Scott, R.A., Architect 416
London Street Architecture: Shops in Oxford-street.—Messrs. Tolley & Dale, Architects 417

CONTENTS.

Alfred George Stevens, Sculptor 405
Architecture at the Royal Academy: Second Notice 406
Among the Academy Pictures 407
Royal Institute of British Architects 408
Stockton and Middlesbrough Waterworks Bill 408
The South-Eastern Railway Company's New Branch to Blackfriars 408
School-Board for London 408
School Board Schools 408
Sewerage Works at Yardley 409
Builders' Benevolent Institution 409
Association of Sanitary Inspectors 409
Church-Building News 410
Annals of a Fortress 411
Opening of the Alexandra Palace 412
The Wood-Carvers and Châlet-Builders of Switzerland 413
From Rome 414
The Proposed Monument to Bishop Wilberforce in Winchester Cathedral 416
New Shops in Oxford-street 416
Public Health and Public Filth 419
Artisans and Labourers' Dwellings Bill 419
Concrete Building and Patents 419
West-end Theatre and Winter Gardens for Edinburgh 420
The New Southminster Theatre, Edinburgh 420
Wiltshire Monuments 420
Laying Out the Hatcham Estate: New Schools, a Church, and other Buildings 420
Messrs. Moody & Sankey's Tabernacle at Camberwell 421
The Belfast Architectural Association 421
Borough of Sunderland: To Architects 421
The Legal Commencement and Termination of a Tenancy 421
The Proposed New Bridge across the Thames 421
Ancient Crosses in Cheshire 421
Enlargement of the Liverpool Free Library 422
The Antiquities of Warwickshire 422
"Obituary," or "Deceased," 1874 422
The Shaft at the Pumping Station, Grosvenor-road 422
Election of District Surveyors 422
Members' Night: Architectural Association 422
Town Surveyor for Cirencester 422
The Tenby Council and their Engineer 422
The Mine under the Great Western Railway at Wolmsbury 422
Transmission of Sound 422
Ventilation 423
Defence of Local Self-Government 423
Improvements at Woodside Ferry, Liverpool 423
Liability of Builders: Hiring Carts 423
Liabilities of Sureties: Hawkins v. Aldershott School Board 423
Architects' Actions 423
Miscellanea 424



Alfred George Stevens, Sculptor.

IT is with much regret we announce the death of Mr. Alfred Stevens, who has been heard of by many of our readers, chiefly as the "Impracticable Artist," who set everybody at defiance. He was, however, much more than this. Alfred Stevens was born at Blandford, in Dorsetshire, in the year 1817, and was a relative of the Mr. Steevens who edited Shakspeare; his father having been the first to drop what he considered the superfluous letter *e* in the name. He early showed a taste for art, and was sent, when sixteen years of age, by the generosity of an individual, to Italy, where he remained for something like fourteen years, becoming, by earnest and unremitting study, so intensely imbued with Italian feeling, as to be more like one of the men we read of in "Vasari," than an ordinary Englishman; and, indeed, his conduct with regard to business transactions reads exactly like that of those intractable geniuses one meets with in that incomparable collection of biographies.

While in Rome Mr. Stevens executed various works for the Danish sculptor Thorwaldsen, but the particular works are not known. Shortly after his return he was engaged by Mr. Henry E. Hoole, of Green-lane Works, Sheffield, who had the sagacity to perceive his genius, and avail himself of it, and who has reaped a large reward in the high position since held by his firm in consequence. Mr. Stevens left Sheffield to settle in London, where he has been constantly occupied with various works, which he enriched with the wealth of his imagination and the purity of his taste. Among these we may mention the decoration of several mansions for Mr. Collmann, two spandrels under the dome of St. Paul's Cathedral, and various decorative works at Mr. R. Holford's house in Park-lane. He also assisted the late Professor C. R. Cockerell in arranging the sculpture in the tympanum of St. George's Hall, Liverpool, and with other works. He sent a very fine design in the competition for the Foreign Offices some years ago, but was unsuccessful, as our readers probably know. He will, however, be best known and remembered by his last and greatest work, the Wellington Monument for St. Paul's.

When the competition was invited for this, he sent in a model which, though not receiving the first premium, was found, on more mature consideration, to be the best adapted to the site and purpose. The general design has been described and criticised in these columns, so we will not further allude to it just now than to remark that the *motif* of it appears to have been the high altar (tomb) by Matteo Carmero (or Carnero) in the church of SS. Gio. e Paolo, at Venice, dated about 1610. He received the commission to execute the work while Lord John Manners was at the Office of Woods and Forests, which then had the direction of these matters. This monument was the darling of Stevens's life; he lavished all his money upon it, and, as to time, he considered it of no consequence whatever. He lingered over the work with the most refined fastidiousness and the most loving devotion, and never did a mistress receive more attention from her lover than this monument from poor Stevens. It is well known how at length the public grew weary of the procrastination, and how the work was taken out of his hands. The Government entered into a contract with Mr. Leonard W. Collmann to complete it, on his promising to employ Mr. Stevens in the preparation of the models for the bronze-work, and the final finishing and fixing of the whole monument. They were very old friends, having met each other while studying in the Tribune of the Uffizii, at Florence. Their acquaintance, renewed on their return to England, ripened into a friendship which endured through the usual misunderstandings common to so long a period. Mr. Collmann had often availed himself of Mr. Stevens's ability in works of architectural decoration from time to time; and when the hitch came he stepped forward as a friend of Mr. Stevens at the request of the Government, and, by undertaking the responsible business-part, he secured Mr. Stevens's continued services to the nation in the completion of this fine work.

It would have been a great misfortune, as we said at the time, if it had been then entrusted to a new and strange hand, or if it had been left unfinished now; but happily the last models required are so complete that nothing need be done with them but to send them to the bronze-foundry with the impress of the master's hand upon them. We are enabled to state that the intentions of Mr. Stevens with regard to the completion of his work are so clear and obvious, and the state of it is so perfect, that no one need interfere with it, and therefore no one will be able to filch from the dead the credit of this noble work. Nothing now remains to be done but for Mr. Collmann to carry out his contract, and to complete the casting and fixing as soon as possible; and from his long friendship and his veneration for the work of his departed friend, we feel sure every one who knows him will have confidence in his doing so in as conscientious a manner and with as little delay as possible. We propose soon to publish a view of the monument and some details of it.

Stevens's works show the influence of Michelangelo, and, like that great man, he lived almost as a hermit, shunning publicity, and hence was very little known outside the circle of his disciples. Those only who enjoyed his friendship can speak as to the kindness with which he gave advice and assistance to younger men, and the interest he took in their welfare and advancement in life. He was architect, sculptor, painter, and mechanician, like the old Italians, being a master in each, and he had also no mean taste in music.

In 1869 Mr. Stevens was appointed by the First Commissioner of Works a member of a voluntary committee to inspect and report upon the condition of the tomb of King Henry VII., with a view to its restoration and preservation. Mr. Stevens was afterwards appointed a Fellow of the "Regia Accademia Raffaello in Urbeino," receiving the medal of the Society "Onoriamo Le Arti."

He did not form a school, but his more immediate pupils were:—Messrs. William Ellis and Henry Hoyles, of Sheffield; and Messrs. Robert Eaton, James Gamble, Hugh Stannus, A.R.I.B.A., Godfrey Sykes (deceased), and Reuben Townroe, of London. Among others who have profited by the study of his works may also be mentioned Messrs. M. Elden, R. Lunn, F. W. Moody, and George Theaker. The thoroughness of his mind seems to have been infused into his pupils, most of them being to a considerable extent architect, ornamentist, and worker in the plastic arts.

We should not omit to mention that he had prepared a model and scheme for the decoration of St. Paul's, which we hope, though we are not acquainted with it, may soon be exhibited, that the world may judge how he would have done this work.

Mr. Stevens's death, though ultimately sudden, was not wholly unexpected, an attack of paralysis, a year or two ago, having considerably weakened his physical powers; but it is evident that he himself little knew his end was so near, as in the afternoon previously to his death he wrote to his friend, and now his executor, Mr. Alfred Pegler,—"I am very well to-day, better than before my illness, and working vigorously, finishing some trifles for the vaulting." He added, with respect to the work which had engaged so much of his time and energies,—"From 1865, when this monument began, till now, I have not, my illness included, been three months away from the work altogether; I have just ascertained this." This, as it proves the unconsciously dying testimony of the artist himself of his devotion to the duty he had undertaken, will doubtless be a satisfaction to friends who have seen the criticisms from time to time passed upon him consequent upon the noncompletion of the work.

He was working till half-past five on Friday afternoon of last week, and, as we have seen, thought himself better. However, he called for his servant on Saturday morning, about three, and before she could come he was dead. The cause was disease of the heart of long standing, upon which bronchitis had supervened.

Thus has passed away from us a man, quiet and unobtrusive in his ways, whose influence in Classic Art has been, and will continue to be, very strongly felt, and whose death we cannot speak of as less than a loss to the nation.

ARCHITECTURE AT THE ROYAL ACADEMY.

SECOND NOTICE.

FOREMOST among the illustrations of civil architecture of the year stands undoubtedly the design submitted by Sir Gilbert Scott, in conjunction with Mr. J. O. Scott, for the Parliament House for the German Government, and which received a premium in the competition. Four of the drawings,—the exterior perspective, the perspective section through the dome, the general section, front elevation, and interior view of the Hall of Session (Nos. 1,004, 926, 946, 954, 965),—are exhibited here "by the kind permission of the German Government." Our distinguished English architect has very ably and ingeniously adapted a German manner and feeling in his design, without sacrificing entirely his own character of detail. It is rather difficult to characterise the style of treatment which is the result; the general composition is decidedly Classic in character, entirely symmetrical in disposition, with a large central dome, and subsidiary cupolas and turrets, which recall a minaret type; a good deal of the ornamental detail, in the section through the dome especially, is Classic in type (a concession to the architectural creed of Munich and Berlin, no doubt), but the architect is faithful to the pointed arch, and introduces more or less pure Gothic manner in the treatment of capitals and shafts, and the spire terminations of some of the turrets. The central dome is circular on plan, and the problem of its junction with what may be termed the nave and transept roofs at the crossing, is hardly satisfactorily solved: in its general aspect this central feature partakes much more of Gothic (with a touch of Orientalism) than of Classic; in the perspective view its proportions have been considerably raised beyond the height shown in the elevation; too much so, the elevation showing the better balance and proportion. The central compartment internally is completely covered with decoration, carved or painted, indicated in careful pen-drawing: this is a fine drawing in every way, and surmounts a difficult task in perspective,—the delineation of the receding curves of arches built on a circular plan. We should have been glad to see the plan of the whole building, in addition to the other drawings exhibited.

Of other works in civic architecture, there are not many. Mr. Crossland sends a fine coloured view of his "Town-hall, Rochdale" (1,043), and the principal staircase from the same building (927), a vaulted apartment, lighted from windows with armorial devices. The building is in a late type of Gothic, freely and rather boldly treated in parts; the tower is the least successful portion, and the lantern appears to us disproportionately large. The building seems to have great advantages of site, according to this drawing; standing in the midst of a kind of open park, apparently. Mr. Collins's exterior and interior views of his design for the New Liberal Club in Walbrook we noticed at the time of the competition. Mr. Street's south-east view of "Cuddesdon College, Oxford" (953), showing the new chapel now being erected to the memory of Bishop Wilberforce, is one of those pen-sketches of which the authorship is at once recognisable; the design shows an irregular plain collegiate building in that very severe and solid type of Gothic which its author has for some time adopted. Passing over some designs which really present nothing for comment, though in a general way meritorious (so far as a design can be called meritorious under such a qualification), we notice Mr. Crossland's "Post-office at Huddersfield" (1,013), which looks too like a post-office, perhaps, to be really pleasing architecture, but shows considerable originality in what may be termed a Gothic manner of grouping and treating Italian detail; the dormers, which especially give this character, however, seem a little too extensively developed. The "New Front of St. James's Hall" (1,019), now building from the designs of Mr. Emden, is (as there is now evidence apart from this drawing) a red brick or terra-cotta Gothic front, with a heavy machicolated cornice, retaining, whether intentionally or not, a kind of reminiscence of the present front in its general proportion and aspect. We cannot praise Mr. Gibson's "City Bank at Exeter" (1,024); surely a picturesque historic town might have suggested something less formal and uninteresting than this cube of building. Mr. Burder's design for the Sunderland Municipal Buildings has in a quiet way a good deal of merit. It shows Queen Anne tendencies, though in a very simple way, with a generally square form, strongly-marked brick cornice, and mullioned and transomed windows: there is just enough variation from symmetrical treatment to do away with any formal appearance, and give the semi-domestic, semi-business character suitable to a municipal building on a moderate scale. Mr. Tasker's "St. Charles College, Notting-hill" (1,035), is shown in a neat but rather mechanical-looking lined drawing; the best portion of the design is the chapel, which is in a manner a little resembling Mr. Sedding's church at Newmarket, mentioned in our last article. Then we have "One of the Board Schools of London" (1,042),—at Greenwich, the label on the drawing informs us,—by Messrs. Robson & Stevenson, on which we look with mingled feelings. The present architect to the School Board is certainly leaving his mark on the London architecture of to-day in these large "Queen-Annified" schools, which are carried out with knowledge of the style, and to which a certain architectural character has been imparted at little expense, and in a practically suitable manner; and perhaps this is a good deal to say as times go. But why strive to make school-buildings which, when once stained with London smoke, will seem to have been built in a reign long previous to the present? If Messrs. Robson & Stevenson had spent the same trouble in devising a suitable architectural treatment of their own, which they have given to securing the accurate reproduction of their chosen style of the past, they might have done something better, and not so dependent on fashion. These buildings will not be permanently commended; they will look very uninviting and factory-like when once the gloss of combined newness and novelty wears off. Near this drawing we notice a small and wiry-looking Gothic elevation, which proves to be a design for the National Gallery, kindly supplied to us by Sir J. H. Ramsay, and drawn for him by Mr. E. Clark. Considering that Mr. E. M. Barry, a competent architect, has made a fine design, approved by Government, and which they may be said to be under a double obligation to carry out, the putting forward in this way of a private design which might have been made by any architectural pupil of ordinary capability, is a proceeding which seems to us little less than impudent.

If it is true that imitation is the most delicate flattery, Mr. Norman Shaw must feel much flattered. He, to a great extent, originated the revival of what we may call the old-English farmstead style for modern dwellings, and his skill as a draughtsman gave to his designs a charm which not a few younger members of the profession have evidently striven to emulate. Unfortunately, just as they are more "to the fore" than ever in this particular manner of work, their guide has left them for the newer vogue of brick pilasters and curly gables. His *pièce de résistance* in the present exhibition is a fine drawing (904), representing a house now erecting in Queen's Gate, Kensington; but it is really a pity that such beautiful drawing should be devoted to a design largely made up of mere corruptions of architectural detail, and all the best points in which—the effective grouping and treatment of the windows, and the bold recessed arches in the ground-story, with bays within them—might have been combined with detail and finish of a much higher class. Among the numerous specimens of the "picturesque" style of house just referred to, many of which are so like each other that one description would serve for all, may be mentioned "Additions to Pinewood, Witley" (922), by Mr. Neville; two houses at Mill Hill, by Mr. Collcutt (930, 948); a house, by Mr. E. F. C. Clarke (968); and one by Mr. J. Adams (992); and a house at Westgate-on-Sea, drawn by Mr. J. Deason, from the designs of Mr. Beazley (1,011): this last is a very effective drawing. All these houses look well in the drawing, but the effect is obtained at little expense of thought, we should imagine, and certainly begins to pall upon one. Mr. Auld sends a little geometrical elevation for a town-house (977), which is what may be correctly termed "free Classic," and looks as if it would work out very well. The typical Queen Anne house is shown in its completeness in the admirable realistic coloured drawing of No. 8, Palace Gate, Kensington (983), by Messrs. Stevenson & Robson. This, in the reddest of red brick, completely succeeds in imposing itself upon the spectator as a house of the period referred to. Another weakness of the new school is exemplified in it; every one knows that a great *penchant* for old china is part of the creed of the *dilettanti* of this school; and, accordingly, in a niche of the size and proportion for a whole-length statue, a piece of crockery is deposited as the centre object of the front, the shape and size of which suggests the idea that a "slop-bowl" from one of the bedrooms has been inadvertently put outside. Mr. Cockerell is in the prevalent style too, with a large mansion at Crawley, near Winchester (985), a perspective view tinted in Indian ink (a style of execution we are glad to see not entirely going out—it gives much effect with comparatively little labour), which we surmise hardly represents the detail very well; the effect is rather thin and poor, but the general grouping is effective, and the two octagon turrets are very well placed. St. Leonard's Hall, Berks, by Mr. Howell (1,003), is a purely Classic design in detail, with an unusual and effective plan of the centre block, which adds much to the appearance of the whole. If, in our Classic houses, architects would be a little bolder in varying the plan, instead of being so often content to design as if square rectangular blocks were a necessity in any house with Italian detail, we might find the way to some new combinations; always keeping in due regard the practical convenience of the plan. A building showing a great deal of merit is the new hall and warehouses in course of erection on the estate of the Curriers' Company, by Messrs. J. & J. Belcher (1,023); with details belonging to Late Gothic, there is considerable novelty of design, and the warehouse portion especially is very good as an architectural treatment of a building of this description. Mr. Waterhouse sends a drawing of the chapel and clocktower at Eaton Hall, Cheshire (945), in that heavy and sombre style of water-colour which seems to have been adopted as the medium for representing his designs, and which we cannot think is favourable to their effect on paper. Mr. W. H. White's new buildings at the Château de Bizy, near Vernon, France (996), form a symmetrical block in strictly Classic style, with a columnar order for the conservatory; very well carried out, but not presenting any architectural speciality; the author has done better than this. Among some specimens of shop architecture we may notice Mr. Collcutt's alterations to No. 109, Fleet-street (960), a good specimen of plain shop architecture, with red brick cornices and dressings to the windows, and an open iron grille over part of the front of the shop. Mr. Garling's premises about to be erected in Aldgate-street (962), form a large and effective block of brick building, wanting as it seems to us a little more grouping, either by a modification of the horizontal lines or of the windows. The rebuilding of the (late) Hanover-square Rooms as a club (987) will not, as shown here, be any addition to the street architecture of the neighbourhood.

In the class of decorative design, we refer with pleasure to the two or three drawings of ceiling and wall decorations, for Mr. F. Lehmann (1,031, 1,036, 1,037), by Mr. Aitchison, whose work of this kind is acquiring a deserved reputation, since it is always refined and harmonious in design and effect. The ceiling (1,031) and wall (1,037) depend chiefly on variations of green, in darker and lighter tones, for the ground, broken by flowing floral patterns in gilding, and occasional touches of positive colour; 1,036, a boudoir, is a "harmony in greyish blue and white," as Mr. Whistler might put it, very delicately relieved by faint tints of green and warm buff in the cornice. We like these little specimens of colour design the more since, while dealing freely in pure tints, and not with neutral and nondescript tones, they are yet so perfectly quiet in effect, and form a kind of protest against the somewhat barbarous school of "loud" and gaudy colouring of which we have seen a great deal too much. Mr. Talbert's "Entresol, Study for Decoration" (966), with its arcade of marble (apparently) relieved against the dark rich tones of the wall behind, is an excellent specimen of the work we are accustomed to from him, which we need not describe. There are several of those pen-drawings, showing schemes of internal decoration (by Mr. Moyr Smith and others) which it is the fashion to send to the Academy. We have before expressed an opinion that such drawings are of little use except to show the skill of the author in producing effect with a pen; it is absurd to suppose that a scheme of internal decoration, of which colour must be one of the most important ingredients (if not the most important) can be adequately represented in a colourless drawing.

Among drawings which are sketches only of existing architecture, and not original designs, we should have mentioned Mr. Ellis's study in the west end of the nave of St. Paul's (1,021), as a very good and thorough architectural study in water-colour; a little too hard to claim the highest merit as an artistic drawing, but an exceedingly good specimen of architectural representation. A drawing of the tombs in the south ambulatory of Westminster Abbey (967), by Mr. Crowther, and a very good and free little pen sketch of the Tower of St. Jacques, Antwerp, by Mr. Taylor (1,016), also claim recognition. The architectural room this year is also great in aquariums, or aquaria, of which we can only say that they look very like aquaria; we presume every one knows the sort of water-colour drawing in which works of this kind are generally illustrated; and that when we read "interior of new aquarium at ——," we shall see a building with a glass roof and exotic plants, intermingled with statuary in the usual manner. Why these large structures scarcely ever get into artistic hands we do not understand, unless it is that, like some other good things, they "go by favour."

In the main, the architectural room is fully up to the usual mark this year, perhaps rather beyond it; the large and fine drawings of two or three important projects giving an unusual importance to the collection, in which the standard of drawing at least is very high. We record with pleasure also that the architecture is apparently beginning to get more recognised by the public as an integral part of the exhibition, and that the room mainly devoted to it is not quite so awful a solitude as it was wont to be, nor are its productions passed over with such heartless indifference. Indeed, we heard expressions of absolute enthusiasm over some of the designs, on the part of spectators evidently moved by no special or practical interest in architecture; a fact which we record "*pour encourager les autres.*"

AMONG THE ACADEMY PICTURES.

THOUGH not following, in the ensuing remarks, any strict consecutive order, we may not unsuitably advert in the first instance to the picture which is likely to be the first point of attraction to most visitors in following the order of numbering, Mr. Alma Tadema's large work, "The Sculpture Gallery" (26), the companion to "The Picture Gallery" of last year. In force of colour, and in the interest and character of the figures, this work is scarcely equal to its predecessor,—the subject, perhaps, hardly admitted of an equally effective treatment,—in technical mastery it is superior to it. We have here the interior of the Roman nobleman's sculpture-room, where a slave is turning round a great vase of black marble, mounted on a pivot-stand, so as to bring round to the host and his friends the sculptured figure which supports it, and forms the stem. The other accessories and background consist almost entirely of white marble (statuary and pilasters), a material which Mr. Tadema has taken out a kind of patent for painting; but it was a fortunate idea to bring the black marble to the centre to break up the mass of white, and bring that and the figures into harmony. The latter are draped in costumes of low but warm tones; the host, with a most natural action of slight apprehension, puts out his hand to keep back two round-faced children, who are a little too near the turning mass, and behind whom stands their mother, a worthy matron, who is evidently the Roman prototype of the respectable mother of modern times, to whom "the exhibition" is simply a place of amusement for the children. The figures are admirable in their way, but there is nothing to compare in individuality with the two young seated connoisseurs of "the picture-gallery." The painting of the carved griffins and interlacing scrolls in the pedestal in the foreground is a perfect triumph of imitative work.

Opposite to the above hangs Mr. Millais's principal landscape "The Fringe of the Moor" (74), less palpably a study of foreground than other landscapes of the artist; though here it is perhaps the successful realism of the foreground, its palings and bare shrubs and the dry stone wall skirting the slope and casting shadows down it, that attracts the eye most; the purple shadows over the distance are so heated in tone as to excite scepticism, perhaps, as to the strict truth of colour here; but we are willing to believe in it. This is unquestionably a fine landscape of the realistic school. The "Deserted Garden" (265) is very atmospheric and light in the distant sky, but the foreground has by no means the same power as that of the other. For the group entitled "The Crown of Love" we have no special admiration to express. But in the portrait of Miss Tennant (222) Mr. Millais is himself again. He has had a good subject; and the effect of the deep crimson dress, combined with the luxuriant dark hair of his charming sitter, and the delicate light blue of the necklace, is to realise one of the richest and most harmonious combinations we have ever seen in portraiture; what one may call the luscious effect of the whole is further heightened by the rich full manner of execution; it is a work which must arrest the most careless as well as the most critical spectator. As a contrast to this take "No!" (262), a companion picture apparently, to the now well-known "Yes or No?". The only relation of style between this and the last-named is that no one but Mr. Millais could be the author of either. The latter work is as quiet and placid in tone and feeling as the former is vivacious and piquant; the half-sad, half-firm expression in the countenance of this rather stately and self-possessed young lady, who has decided against the hopes expressed in the letter she holds, is very successfully defined; the hands may have been a little hurried in execution. The picture of the round-cheeked little girl (289) sitting with bare feet by the brink of a pond, is a very real child portrait; but we should think the very solemn expression of the child was aroused only by the awful fact of sitting for her portrait, and it seems out of keeping with the freedom of her open-air situation here. If we were to compare these with the portraits which were in the galleries in winter, we should perhaps be struck with the immobility of most of Mr. Millais's portraits as compared with the free movement of his greatest English predecessor in this branch of art. Not that we complain of Mr. Millais for not being Reynolds; but to a certain extent his comparative stiffness of pose seems to indicate a limit in the more modern painter's art; though an artist of his calibre may choose to prove the contrary next year.

Passing for the present other portraits (and there are some fine ones), we may step a little out of the way to notice a remarkable contribution by an "outsider,"—Mr. Long's "Babylonish Marriage Market" (482), suggested by a custom detailed by Herodotus, whereby husbands were found for all the young women at an annual auction, where the damsels possessed of natural attractions were knocked down to the highest bidder, and, inversely, the plain ones were got rid of by the offer of dowries proportioned to their ugliness. This very heathen institution, it will be at once perceived, offers so good a subject to the painter that it is surprising it has not before been illustrated. In front of the picture, which is crowded with figures, are ranged the damsels in waiting for their turn, commencing with the handsomest one, on the left, just divesting herself of her veil, while her next neighbour studies herself anxiously in a hand-mirror, and then we run down the gamut of beauty, through the neutral ground, where the more and less plain are vivaciously "chaffing" each other, to where the lowest note of the scale is represented in the luckless girl who covers her unfortunate visage with her hands. Above, on a platform, the *prima donna assoluta* is already on approval, her back to the spectator (so that the artist has cunningly evaded depicting the extreme either of beauty or ugliness), and her charms only to be surmised by their effect on the richly-robed young man who gazes up at her in intense admiration, evidently able and willing to pay the consideration demanded. On the left a handsome youth, whose purse apparently is not equal to his ambition, looks on enviously; and the contrast is well given between the interest of these foreground figures and the merely idle amusement of the soldiers and negroes in the rear, to whom it is nothing more than a raree-show, which does not concern them. The colouring is very brilliant, and yet partially fails in effect from want of massing and contrast; and the whole grouping is a little theatrical; nor can we believe (*pace* Herodotus) that such a scene ever really took place. But the humour and technical excellence of the picture are beyond question, and the artist has made his mark by it.

Opposite to this Mr. Armitage's large picture (518), representing "Julian the Apostate presiding at a Conference of Sectarian Christians" (illustrated by a quotation from Gibbon), claims notice as a work original in conception, and very spirited and pointed in execution. At one end of a table the representatives of various sects are wrangling and citing authorities from big books (by the way, are not the bound books, in modern form, an anachronism?), in all the bitterness of religious controversy; the intensity of the *odium theologicum* in the countenance of the figure by the column in the rear is something rather awful, increased as the effect is by contrast with the calm demeanour of the polite and refined imperial ritualist, who is the only gentleman of the party. The subject is a capital one; with all the spirit in its treatment, we cannot but feel how provokingly this artist, with perfect technical mastery, just falls short again of that *je ne sais quoi* which gives the highest interest to a picture. Of Mr. Leighton's contributions we have mentioned the "Eastern Slinger" (398), a work which no one can help noticing, yet which few, we fear, can admire as a whole. The man stands, nearly naked, on a platform raised above the corn, shouting and slinging a stone round his head to scare the birds away; his bronzed figure, admirably drawn and shadowed, is relieved against an evening sky, with a very luminous moon just rising over the corn: the manner in which the detail of the figure is made out, without losing the effect of its being in shadow against a light sky, is admirable; but surely the subject was not worth all this technical ability. The fact might, as it seems to us, have suggested an ideal composition very well, but was not worth working out in its plain prose. We have that opinion of Mr. Leighton's powers that we would wish to see them expended only on subjects of the highest intellectual character and interest. The noble "Portrait of Mrs. Gordon" (307), however, is worthy of the artist: the lady, in a dress of warm crimson, leans back with head turned, in a very fine but perfectly unconstrained and natural attitude; the purity of colour in every part of the picture, and the beautiful drawing of the hands may be noticed; the whole spirit of the work is completely above the common-places of portraiture, and looks like Greek art in an English dress. The head of a "Venetian Girl" (354) should be looked at also. Among the few productions, in this exhibition, of that ideal type of art with which Mr. Leighton's name has been so much associated, are Mr. Poynter's two groups of figures of "The Festival" and the "Golden Age" (233, 236), the first, two fully-draped female figures, one on a ladder, the other stooping at the foot, engaged in putting up garlands for decoration; a work which does not give one entire satisfaction, partly on account of the rather constrained attitude of the lower figure, in which the folds of the robe, too, seem a little to confuse instead of assisting the indication of the figure, in the lower limbs at least. The other work is in the artist's very best manner: it is purely ideal,—art for art's sake,—representing two figures of youths, one on a ladder handing down fruit to the other; the harmony of line into which the two figures fall, and the masterly drawing and finish, especially of the upper figure, are in a very high style of art, both ideally and technically: the figures are nearly nude, a little warm-tinted drapery aids the colour effect, and adds breadth to the composition. It is refreshing to come on such a bit of real art amidst the quantities of "namby-pamby" which stare one in the face in all English exhibitions.

Among works of this latter class do we count the various shaving subjects which seem to be rather rife this year, and form rather poor jokes not worth the canvas. In another line of subject rather predominant, however, we find unusual excellence. Battle-pieces are generally common-place affairs; there are two exceptions this year; one of which, the attack on the square of the 28th Regiment at Quatre Bras (258), by Miss Thompson, is a rallying-point for spectators, and perhaps goes further to justify the greatness which has been a little too suddenly and inconsiderately thrust upon the artist than did her last year's work. It is on record that the younger soldiers on this occasion were highly amused, in the midst of the desperate struggle, at the repeated failures of the enemy's cavalry to break their formation. This incident gives the point to the picture, where these raw but brave-spirited lads, laughing like school-boys, are contrasted with the calm determination of the veteran, who, with the butt of his musket dug into the earth, occupies the salient angle of the square in the centre of the picture. Nearly over him the figure of the officer, who points with his drawn sword, is remarkable for energy

of action and expression. It is astonishing that a young lady-artist should have been able to throw herself into the spirit of such a scene so well; but a calm judgment must, we think, pronounce the work artistically somewhat sensational, and the colour crude. A French painter, M. Philippoteau, has put before us the "Charge of the French Cuirassiers at Waterloo" (613),—a subject which Mr. Cooper painted with considerable power a good many years ago. The defect of this picture is that the interest is too exclusively concentrated on the point of attack on the left, and the rest of the canvas seems inadequately occupied; the brilliancy of colour and execution is totally devoid of hardness, the separate figures and expressions of the combatants, the English especially, are admirably studied and individualised: the figure of the general officer on horseback within the square, whose shout we can fancy we hear above the noise of the firing, and the young officer standing on tiptoe to look over the heads of his men, are especially good. Then, in the lecture-room, opposite to Miss Thompson's picture, Mr. Herkomer gives us the veteran survivors of war assembled in Chelsea Hospital Chapel, listening apparently to a sermon on "The Last Muster" (898): a work of a high order in feeling and execution; there is no attempt to excite an artificial interest in the men, who are painted with prosaic truth, some with faces of much natural dignity, others common-looking old fellows enough, but all apparently moved, each in his way, by a kindred sentiment. The dark reddish-toned wainscot and the gallery front are skilfully made use of to reduce what would otherwise be the too pronounced effect of the mass of red uniforms; the result is quite satisfactory to the eye, and the whole highly creditable to the artist, and the best work he has yet sent to the Academy. We must adjourn further remarks; but may just point to Mr. Stock's picture, close by, of "Our Soldiers, Past and Future" (911), a little boy reading some annals of warfare to an old soldier, as further illustrating the military painting of the year. Whether all this indicates a corresponding military ardour, or whether when people take to painting a thing it is a sign that the reality is becoming out of date, we will not attempt to pronounce.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At the annual meeting on Monday last, the report of the Council was passed, after considerable discussion, we believe, on objections made to one or two paragraphs, but eventually over-ruled or withdrawn. The meeting being, formally, a private one as usual, we do not feel at liberty to report the discussions, but as two notices of motion in regard to the conduct of the affairs of the Institute, by Professor Kerr and Mr. W. H. White, had been openly announced and forwarded to us, we may remark that the first-named gentleman stated his case in a very clear and able manner; the object of the motion being to inquire whether the removal of one of the honorary secretaries and the elevation of the paid secretary to practically the same position, as a colleague of the remaining hon. secretary, were in accordance with the conditions of the Institute charter. The motion, however, collapsed, the feeling of the meeting seeming to be that if the present arrangement were not quite in conformity with the letter or spirit of the charter (and it did not appear that Professor Kerr's arguments to this effect received any conclusive answer), it had worked well enough; and, in short, that they were very well as they are. The President supported this view, and spoke warmly in praise of the ability and attention given to the duties of his office by the present secretary; an opinion which the majority, at least, of those present endorsed by acclamation. Mr. White withdrew his motion on account of the lateness of the hour. We are at liberty to conclude, however, that the result of the evening's work may not have been considered satisfactory by all who have the interests of the Institute at heart.

Deaf and Dumb Asylum, Margate.—At a meeting of the Margate corporation on the the 27th ult., it was stated that the Prince of Wales has promised to open the branch building of the Deaf and Dumb Asylum, now being erected in that town, and which, it is supposed, will be completed in July.

STOCKTON AND MIDDLESBROUGH WATERWORKS BILL.

At the House of Commons, on the 16th ult., in the course of the examination by the Select Committee on this Bill, Mr. George Edwards, borough surveyor of Stockton, said he had inspected the towns and villages on the Tees and its tributaries to ascertain the extent of pollution by sewage. The population of Middleton-in-Teesdale was 2,240, and it drained into a beck which ran into the Tees. Barnard Castle had five woollen-mills, flax-mills, a tanyard, a carpet manufactory, and dye-works. He had seen the outfall of the main sewer, which discharged not less than 100,000 gallons daily, and it left a thick scum on the water. Staindrop was a town of 1,100 inhabitants, with a sewer up the main street, and it discharged into a beck, together with the contents of piggeries, cow-houses, &c. Gainford contained about 800 people, and there was an academy with about 120 pupils which drained into the river. About 6,000 gallons flowed daily into the river by that sewer alone, and there was another sewer which ran into the river below the town. There were other small places which drained into the river above the intake. In summer he had frequently seen the river so low that people could walk across dry shod on stepping-stones.

THE SOUTH-EASTERN RAILWAY COMPANY'S NEW BRANCH TO BLACKFRIARS.

The South-Eastern Railway Company have commenced the preliminary works preparatory to the construction of their branch line from the Charing-cross and London Bridge sections of their undertaking, with the view to give the company access to the Ludgate-hill Station of the London, Chatham, and Dover Company. This involves the demolition of a large number of tenements and other buildings in the district intersected by the intended line, and within the last two or three weeks this has been effected. The works in connexion with the actual construction of the line, will, we understand, be entered upon next week. They comprise the erection of several bridges over Ewer-street, Gravel-lane, Swan and Dyer courts, George-street, and Union-place, Southwark. Taking advantage of their experience of the inconvenience and annoyance which have been caused by the imperfect construction of the bridges of the several lines of railway within the metropolis, the local authorities have secured provisions in the company's Act, under which the bridges are not only to range with existing frontages, but precautions are also to be taken to render them water-tight; and a ceiling is to be formed over the roads to be traversed. This ceiling is to consist of 3-in. planks resting on the bottom flanges of cross-girders, and having the joints either caulked or tongued; and the spaces between the planking and the wrought-iron cambered plates are to be filled in with tan or other similar material.

SCHOOL-BOARD FOR LONDON.

Two new schools have been opened recently. One situate in William-street, Kensington, about five minutes' walk from Addison-road Station, and adjoining the old Church Schools of St. Mary, Fulham, which have been used as a temporary school, and will now be utilised for the infants' and for caretakers' rooms, &c. The new building, which is of Gothic design, to match the old, accommodates 304 children, making a total number (including infants) of 454, the girls being placed on the ground and boys on the first floor. The playgrounds are good, and the situation very open. The contractors were Messrs. Hook & Oldrey, whose contract for the works was 3,359*l*.

The other school is situate in the rear of Albany-road, Camberwell, and is approached by Neate-street and Albany-row. It is set back some distance from the street, and forms a considerable block of buildings in the style of "Queen Anne," having ample play-space both in front and rear for the children. There are three stories, with a drawing-class room in addition; each story containing school and four class-rooms for infants, boys, and girls respectively, with masters' and mistresses' rooms, and ample lavatory and cloak-room. The total number of children is 785, and the amount of the contract 6,394*l*. The total cost, including purchase of site, &c., amounted only to the sum of 9*l*. 10*s*. 9*d*. per head. The builder was Mr. G. Stephenson, of Chelsea, and the architect, in both cases, Mr. E. R. Robson. Mr. Jefferson was clerk of works for the first-mentioned, and Mr. J. Jackson for the last.

The following report from the Works Committee has been adopted:—

1. The Committee have invited tenders for the erection of a school to provide accommodation for 552 children on the site in Sydenham-hill-road. It was considered desirable in the case of this, and also a second school, to throw open the tendering (under certain restrictions) to unlimited competition, in order to test whether by this plan any reduction would be effected in the cost of the buildings. Only eight firms tendered for the erection of the school, the amounts of the tenders being as follow:—

Robbins & Co.	£8,545	0	0
Braid, Jopling, & Co.	8,543	0	0
Gammon & Sons	7,753	0	0
Crossley	7,653	0	0
Longley	7,648	19	0
Nightingale	7,480	0	0
Crabb	7,285	0	0
Lonergan	6,671	0	0

As these tenders were unusually high, the committee were unable to recommend any one for acceptance without reduction. They have since conferred with Mr. R. Lonergan, of Herbert-road, Plumstead, whose tender was lowest, and have arranged with him to make certain modifications and omissions in the plan (including the substitution of gravel for tar paving), which will lessen the cost by 1,107*l*. 2*s*. 2*d*., thus reducing his tender to 5,963*l*. 17*s*. 10*d*., details of which are as follow:—School building, 4,546*l*. 17*s*. 10*d*.; playgrounds, 368*l*.; boundary-walls and gates, 416*l*.; caretaker's house, 373*l*.; making a total of 5,703*l*. 17*s*. 10*d*. The committee recommend the acceptance of this amended tender. It should be stated that the walls of the school have been made of such thickness as to allow of an extension of the building, if necessary, a floor having been formed over two class-rooms, and a temporary roof placed on it in order that an additional story may be added hereafter, if necessary, without disturbing the school. Cost of site, 3,500*l*. Cost of building per child, 10*l*. 6*s*. 7*d*.

2. On the 17th of March the Board postponed the consideration of the recommendation of the committee for the acceptance of the tender of Mr. S. J. Jerrard, of Homesdale, Lewisham, amounting to 3,183*l*., for the erection of a school for 250 infants on the site in Queen's-gardens, Brompton. The committee now propose to omit the provision of a caretaker's house, and also a fence in the front of the school, to reduce the height of the class-rooms, and to provide less w.c. accommodation. These omissions and alterations will reduce the cost of the school to 2,500*l*., or 10*l*. per child. The committee recommend that this amended tender be accepted. Cost of site, as far as purchased, 1,074*l*. 3*s*. Cost of building per head, 10*l*.

SCHOOL BOARD SCHOOLS.

East Dereham.—The East Dereham School Board having received an order from the Educational Department to provide accommodation for eighty children, including twelve from Shipdham, in the parish of Toftwood, purchased a piece of land, and has just completed the building of a school to meet the requirement of the Department. Mr. William Larner, of this town, was the contractor, and Mr. Lee, of London, the architect.

Walsall.—On the 5th ult. the Bath-street schools, a block of buildings in the Early English style, and being the fourth set erected by the School Board, were opened for the reception of scholars. The materials used are red pressed bricks, with Bath stone dressings. There is a bell-turret of stone, over the principal entrance, surmounted by a spire which rises to a height of 100 ft. from the ground. The schools afford accommodation for over 600 children—the girls and infants being located on the ground-floor, and the boys on the floor above,—and their cost is somewhere about 3,000*l*. The architect is Mr. T. R. Lysaght, Wolverhampton, and the builder Mr. T. Taylor, Walsall.

Carlisle.—On the 5th ult., the large new schools in this city, belonging to the School Board, were opened with some ceremony. The schools are a plain, substantial erection, free from all attempts at decoration, though black bricks have been extensively used to face the

exterior walls, and so give them some relief of varied colour. There are three schools, one for boys, one for girls, and one for infants. The principal schoolroom is 60 ft. in length by 25 ft. in breadth, though it had been originally intended to be only 20 ft. in breadth. The roof is high pitched and vaulted, and, though ceiled, the main timbers, which have been varnished, are allowed to be visible, and this arrangement has a good effect in relief. The extent of the site is about three-quarters of an acre, which cost over 1,000*l.*, the price paid being at the rate of 5*s.* per square yard. The total cost of the erection has been about 5,500*l.*, which was borrowed from the Public Works Commissioners, and is repayable in fifty years, in annual instalments of 23*l.*

Brighton.—The following were the tenders for the erection of the Lewes-road schools:—

Barnes	£5,593 0 0
Cheesman	5,585 0 0
Lockyer	5,393 0 0
Reynolds	5,199 0 0
Newnham	5,045 0 0
Sawyer	5,024 0 0
Bruton	4,885 0 0
Colwell	4,750 0 0
Spreadborough & Feldwick	4,661 0 0
Kemp	4,660 0 0
Wells & Miles	4,658 0 0
J. & A. Stenning (accepted)	4,530 0 0

Axminster.—Messrs. Parsons & Perryman's tender for 2,151*l.* 18*s.* has been accepted by the School Board, for the building of the new schools.

Liverpool.—The Liverpool School Board have sanctioned the plans for the erection of a large school in Walton-lane, near Liverpool, and also agreed to purchase ground in Kirkdale, at a cost of about 3,000*l.*, for the erection of another school.

Ancoats (Manchester).—The memorial-stone of the Every-street School was laid on the 15th ult., by Mr. T. Dale, the vice-chairman of the Board. This school is the largest of three schools which the Board have now in course of erection. It will accommodate 1,800 children. The ground-floor is divided in the centre by the principal entrance-hall, 10 ft. wide; staircase, 4 ft. 6 in. wide; and infants' cloak-room, 10 ft. by 18 ft. On the right of this central arrangement there is the school-room for 250 male infants, 30 ft. by 59 ft. 6 in., with a class-room adjoining, 18 ft. by 21 ft. 9 in., and on the left a second school-room, for 250 female infants, also 30 ft. by 59 ft. 6 in., and a class-room adjoining, 16 ft. by 24 ft. The rooms on the upper floor are very similar, both in size and arrangement. The staircase to the girls' school rises from the central entrance-hall; while that to the boys' school is placed at the end of the building, to the right. The ground-floor rooms are 14 ft. high, and the first-floor rooms 11 ft. high to the wall-plate, and 17 ft. high to the ceiling at the collar-line. The basement extends under the whole of the building. The large areas under the infants' school-room and under the female infants' class-room are arranged as covered playgrounds, opening out into the sunk playgrounds in the rear of the building. The school-rooms will be heated by Shillito & Shorland's Manchester grates, and the ventilation has been specially provided for. The building will be constructed of common white-ended bricks, jointed in black mortar. The arches, bands, strings, and other ornamental features will be formed in black bricks and red stocks, with specially-made bricks introduced in various parts. A central tower, together with the buttresses and slightly-projecting wings, will give a variety to the principal front. The cost will be about 10,000*l.* Mr. W. Dawes is the architect.

Tingewick. — These schools were recently opened by Sir Harry Verney, bart. The building is contructed of the local bricks, with facings and string-courses of red Thornborough brick, and Aylesbury rubbers for dressed work. Bath stone and red Mansfield have also been sparingly used, and black Staffordshire bricks in diapers and bands, the roofs being covered with reddish brown tiles. Separate room porches of half-timber work on brick plinths are provided for boys, girls, and infants. There is an oak bell-cote, covered with shingles and surmounted with wrought-iron girouette. The bell was supplied by Messrs. Vicker & Co., of Sheffield; the ridges and finials by Mr. Cooper, of Maidenhead. The building accommodates 114 boys and girls and 60 infants. The gables have framed barge-boards. The rooms are ventilated by the hollow beam system, and warmed by open-hooded fireplaces fitted with Penfold's stoves. Play-grounds, bounded either by walls or railing, have also been provided. The cost, inclusive of boundaries, offices, school furniture, and architect's commission, is 810*l.* The work has been carried out by Mr. W. Williams, builder, of Green's Norton, near Towcester, from the designs and under the superintendence of Mr. E. Swinfen Harris, architect, of London and Stony Stratford.

Bideford.—The tender of Messrs. Bowden & Son, of Barnstaple, for the new Board School at Bideford, at 360*l.*, has been accepted.

Cholsey (Wallingford). — The tender of Mr. Dodd, at 1,461*l.*, being the lowest of five for the erection of new schools and master's house, at Cholsey, for the Cholsey School Board, has been accepted.

Stoke-upon-Trent.—On the 26th ult., the Harpfield Schools, which have been erected for the Stoke School Board by Mr. Bradbury, from the designs of Mr. Lynam, were formally opened. The schools will accommodate 290 children, and have cost 1,510*l.*, or about 5*l.* 4*s.* per head.

Tenterden.—At a meeting of the School Board, the following tenders for the erection of additional school buildings on the premises of the Board, were received:—

Harnett	£302 0 0
Bunnett	749 12 4
Martin	732 19 0
Stiff	719 0 0
Bingham	675 0 0

It was proposed that Mr. Bingham's tender should be accepted, subject to the approval of the Education Department, which proposition was agreed to. Mr. W. King, of Ashford, is the architect.

SEWERAGE WORKS AT YARDLEY.

ON the 22nd ult., Lieut.-Col. Ponsonby Cox, R.E., attended at the Free School, Yardley, and held an inquiry respecting the application of the Sanitary Authority of the rural sanitary district of the Solihull Union to the Local Government Board, for sanction to borrow 45,000*l.* for works of sewerage for the parish of Yardley.

Colonel Cox, in opening the proceedings, explained that application had been received by the Local Government Board from the Rural Sanitary Authority of the Union of Solihull, for sanction to borrow the sum of 45,000*l.* He understood, he said, that of the 45,000*l.*, 15,000*l.* were required for the purchase of land, and 30,000*l.* for works. Before a loan of that description could be obtained the sanction of the Local Government was required, and it was the practice of that Board, before giving sanction, to satisfy themselves, by means of inquiry in the district, upon the general advisability and merits of the scheme for which the money was required.

Evidence having been given by Mr. Pritchard, C.E., and others, Colonel Cox said he would report in due time.

BUILDERS' BENEVOLENT INSTITUTION.

A SPECIAL meeting of the subscribers and donors of this Institution was held on Thursday afternoon, the 6th inst., at Willis's Rooms, St. James's, Mr. George Dines, president, in the chair. There were also present Messrs. Dove, Kendall, Plucknett, Simpson, Bussell, Tozer, Hannen, Watson, Kelly, Norris, Waller, Hall, Trollope, Purkiss, Taylor, Williams, Patrick, Fish, Manley, Head, Todd, Morris, and J. Morris.

The Chairman, in opening the proceedings, referred in feeling terms to the loss which the Institution had sustained by the recent death of Mr. A. G. Harris, who for the last eight-and-twenty years filled the office of secretary with great ability and courtesy. Reverting to the object of the meeting, the Chairman said the subject for consideration was the desirability of transferring the sum of 3,541*l.* 8*s.* 5*d.*, now standing to the credit of the Building Fund of the Institution, to the General Relief Fund. The nucleus of this sum was subscribed many years ago with the view of erecting almshouses for the pensioners of the Institution, but, in the altered circumstances of society, it was extremely doubtful whether it was advisable to build almshouses, especially as only five of the forty-five pensioners of the Institution had expressed a desire to fill a vacancy which occurred some time ago in the Bricklayers' and Tilers' Almshouses, the old people preferring to reside with their friends. The Chairman read a letter from Sir James Clarke Lawrence, one of the patrons of the Institution, approving of the proposal to transfer the money to the Relief Fund, and expressing his opinion that almshouses were a most expensive form of charity, and that the day for erecting them had passed away.

Mr. Dove moved, Mr. Plucknett (Cubitt & Co.) seconded, and it was unanimously resolved, "That in the opinion of this meeting it is most desirable that the money standing in the name of the Building Fund be transferred to the General Relief Fund, and that the interest arising therefrom be applied to the purposes of the Institution in the same way as the interest on the Relief Fund is now applied."

Mr. Hannen then moved, Mr. Trollope seconded, and it was resolved *nem. con.*, "That the directors be empowered to take such steps as may be necessary to carry the foregoing resolution into effect." A vote of condolence with the widow of the late secretary having been passed, the meeting terminated. Mr. John Aird, jun., has consented to be the president of the Institution for the ensuing year. An election of pensioners will take place on the 20th inst.

ASSOCIATION OF SANITARY INSPECTORS.

A MEETING of the inspectors of the combined Sanitary Authorities in the counties of Northampton, Leicester, Rutland, and Bucks, was held on Monday last, at the Sun Inn, Rothwell, when there were present:—Mr. Branson (Newport Pagnel), chairman; Mr. Gardner (Northampton Urban), secretary; Mr. Killingbeck (Northampton Rural), Mr. Spencer (Northampton Rural), Mr. Abbott and Mr. Brown (Hardingstone), Mr. Spendlove (Thrapston), Mr. Packwood (Wellingborough), Mr. Harvey (Uppingham), and Mr. Wright (Market Harborough). Mr. Haviland, Medical Officer of Health, and president of the Association, was also present.

After partaking of dinner, a short discussion ensued as to the desirability of petitioning Parliament to introduce certain clauses in the present Public Health Bill, with regard to the necessity of a more summary action being taken in the removal of nuisances, and also that it should be made compulsory for medical men to give notice of the existence of any contagious diseases under their care, whether in public or private practice.

Mr. Abbott proposed and Mr. Spendlove seconded, that the Association should forward a petition in favour of a clause securing more prompt action in the removal of nuisances; and Mr. Gardner proposed, and Mr. Wright seconded, that a petition should be forwarded in favour of its being made compulsory on medical men to report any cases of contagious or infectious diseases that might occur within their practice.

Both propositions were unanimously agreed to.

Mr. Haviland again introduced the subject of the Goux system of disposing of sewage. He had submitted to the Inspectors two questions,—first, with reference to the practicability of adopting the system in the various villages of the area; and, secondly, whether the cottagers would consent to the removal of the manure, on a promise that they should receive it back again when matured? Mr. Haviland now read the answers to these questions, which were generally favourable to the adoption of the system. He was extremely anxious that something should be done speedily, and the Goux system was certainly the best he had ever seen. Since the publication of the report of his visit to Halifax, he had been sent for to Salford, into Kent, and to several parts of the country, to advise as to the best way of carrying out the Goux system; and the reason he had asked these questions was to see how it could be carried out in their own area.

The following resolution was finally agreed to: "That this Association, after very carefully testing the different systems of sewage disposal, are of opinion that it is desirable to represent to the delegates of the combined area the necessity of their determining on adopting some system of dry earth or ash privies (such as the Goux system), or any other portable system, under the entire superintendence of the Inspector of Nuisances, as the simplest system of disposing of village sewage."

The Land Clauses Amendment Bill, now before Parliament, proposes to do away with juries in all cases of compensation above 50*l.* The claims are proposed to be settled by arbitration.

CHURCH BUILDING NEWS.

Barnard Castle.—The foundation-stone of the church attached to the Bowes Museum, at Barnard Castle, was laid on the 6th ult. by Mr. John Bowes, of Streatham Castle. Mr. Watson, of Newcastle-on-Tyne, is the architect; and Mr. Kyle, the contractor.

Coventry.—Mr. Eusebius Caldicott, of Sherbourne House, has forwarded to the rector of St. John's Church, the handsome donation of 500*l.* towards the fund for the restoration of this old edifice. Sir G. Scott is engaged in forming plans and estimates for the work, the probable cost of which will be over 4,000*l.*

Heaton Moor.—On the 3rd ult. the foundation-stone of the new church of St. Paul, Heaton Moor, near Stockport, was laid by Mr. W. Romaine Callender, M.P. The church will seat 400, and will cost 5,500*l.*

Rickmansworth. — The consecration of the new church of St. Peter, Mill End, has taken place. The work of erection was commenced about eleven months ago in consequence of the munificent offering of 2,000 guineas by Mr. E. C. Walker. Its length is 100 ft., and breadth —in nave—25 ft., and in the transepts 45 ft.; from base to roof the elevation is 18 ft., but in some places 16 ft. only. The fabric is principally of flint, with Bath stone dressings, and covered in with slates, and capped with red ridge tiles, having at the extreme west end a bell-turret. The designs, excepting that for the font, were drawn by Mr. S. C. Sutton, of Bronly House. Mr. T. Holland, of Rickmansworth, was the builder; and the stonework was executed by Messrs. Clifford & Gough, of Watford. It is stated that the cost of the new edifice will exceed 3,000*l.*

Lynn.—The ancient church of St. Margaret, at Lynn, has been re-opened after repairs and renovation. The works executed, though not fairly described by the word "restoration," are yet of importance, and, perhaps, included as much as could be hoped for, considering that the greater part of the Early English and Perpendicular church had been destroyed, and rebuilt in a debased though substantial manner, and that nothing less than a similar process could effect a restoration of its original form and character. A lantern tower, after being carried up only a few feet, has had to be abruptly roofed in, owing, it is understood, to its being too severe a strain upon the substructure. The chancel-roof has been re-slated; and the lead of the nave roof has been re-cast and re-laid. The floor of the nave has been lowered 4 ft. or 5 ft., and underdrained. The chancel floor has also been excavated, the coffins and putrid remains under its pavement removed and re-interred, and a bed of asphalte and concrete laid, upon which stone and Staffordshire-tile pavement is laid. All the cumbrous pews and galleries have been cleared out; the organ removed from the west gallery, and rebuilt in the north aisle of the chancel; and low, open seats of solid oak, on a slightly raised platform, substituted for the pews in the nave of its aisles. The debased walls and meaningless piers and arches of the nave remain; but the superincumbent plaster and paint have been removed. The interior heavy plastered ceilings have also been removed, and the rough timberings of the roofs altered and panelled in. The expenditure has been about 7,000*l.* The repair of the chancel has been directed by the Mr. Ewan Christian, architect, and the general work elsewhere by Sir G. Gilbert Scott. Messrs. Bell were the contractors.

Manea.—The bishop of the diocese has consecrated the new Church of St. Nicholas, which has just been erected in this village. It is erected on the site of the old building, but with an additional area, and comprises a nave, chancel, transept, north aisle, and vestry, with a porch on the north side, and a western entrance. The style is Early Decorated. It is contemplated to erect a tower and spire at some future time, a small turret for a single bell being for the present provided. The eastern window of the chancel, and also that of the western entrance and the transept, are triple-light, with hood moulds, &c., the centre light of the chancel window having a traceried head. The windows of the nave and aisle are two-light, with painted heads. The nave arcading comprises circular columns, with moulded bases, caps, hoods, &c. The clearstory windows are alternately trefoil and quatrefoil. The walls of the chancel are plastered, prepared for decoration, and the nave and aisle walls inside are faced with brick. Bath stone from the Box-ground quarries is used for the door and window dressings, and inside the moulded work generally; and the walling stone, which harmonises well, is from the quarries of Mr. Godwin, at Eton. The roofs, which are open, are constructed of fir; and the seats are of deal, varnished. The chancel floor is laid with Maw's encaustic tiles, by Messrs. Simpson, London; the flooring in the body of the church being red and black Staffordshire. The entrances have columns, with moulded caps and bases, and moulded arches. The total cost will be about 3,700*l.* The building, which will accommodate 400 people, is carried out from designs by Mr. James Ruddle, Peterborough, and the works have been executed by Mr. W. Hutchinson, of March. The heating apparatus was supplied by Messrs. Haden, of Trowbridge.

Plumtree. — This old parish church has been re-opened. The edifice for some considerable time past had been in a most dilapidated condition. The building, with the exception of the exterior of the clearstory and the tower, has been entirely rebuilt, and the interior has undergone a complete change. The chancel is entirely new, and in addition to the building a new east window of stained glass, by Messrs. Burlison & Grylls, of London, has been placed. The north aisle is also new, composed of stone taken from the Old Trent Bridge; and the south aisle, together with the porch over the south door, has been rebuilt, the latter being erected with split flints and faced with stone. The original design has been strictly adhered to. The works have been carried out from the designs of Messrs. Bodley & Gardner, architects, of London. In the interior, the old galleries have been removed, and the ancient pews have been replaced by stained deal seats, the woodwork of which was executed by Mr. Wilson, of Plumptree. The mason's work was carried out by Mr. Hithcock, of Keyworth. The cost of the undertaking is about 4,000*l.*

North Walsham.—The old parish church of this town has had its chancel improved, and been provided with a new organ. A large window, of the Decorated style, corresponding in its proportions to the original window, filled with cathedral glass, has been inserted at the east end, and a reredos and communion-table presented to the church. The reredos, which is divided into five compartments, is of Caen stone, and the arcade is supported by sixteen polished Rosso marble shafts, the spandrels being inlaid with Devonshire green, antico, alabaster, and jewels. Carved diaper relieves the surface of the panels, and the centre one contains a cross of black polished marble, having a base of polished grey Ipplepen marble. Mrs. Martin Shepheard, at a cost of 510*l.*, has provided the chancel with a new roof of English oak, covered with lead, similar in its character to the old roof; and one bay of the nave and two bays of the north aisle have at the same time been new roofed at an expense of 290*l.* The works were entrusted to Mr. R. Cornish.

Woodbridge.—The parish church of St. Mary, Woodbridge, has been re-opened, after restoration and re-arrangement. The church, of flint and freestone, is of the date of the fourteenth century, the steeple being of a century later date. It consists of nave, with north and south aisles, between the nave and aisles being six arches, of which the full proportions are now visible, while on the north of the chancel is the Seckford Chapel, now used as an organ chamber, the organ having been moved there from the west gallery, by the demolition of which, and the throwing in of the ground-floor of the tower, the five-light west window is opened up. The roof is a hammer-beam roof with embattled mouldings. The pews have been cleared away, and the space supplied with benches, arranged in four groups. The benches are supplemented by chairs, of the ecclesiastical type, and a row is placed at the bench-ends on either side the centre passage, leaving a good wide space. In the chancel the benches have carved poppy-heads, and, with the chairs at the west end, accommodation is afforded for about 850 people. The lighting is by gas standards, and the warming by hot-air apparatus. The old rood-screen, parts of which were found doing duty behind the green baize as parts of the boards of the pews, and other parts as a portion of the reading-desks, has been replaced. The communion table or altar is raised on three steps, and the altar space paved with Minton's tiles, the sanctuary or space within the communion-rails being similarly paved. The church contains a large number of stones to the memory of departed worthies of Woodbridge and neighbourhood. There are also two memorial windows in the north aisle. The restoration, which has cost about 1,700*l.*, has been carried out upon the plans and under the supervision of Mr. R. M. Phipson, architect, of Ipswich and Norwich, by Mr. John Frost and Mr. G. Thurman, carpenters; Mr. W. Stephenson, stonemason; Mr. Dove and Mr. Forsdick, builders; and Mr. G. Gall, gasfitter, &c.

Escot (Devon).—Improvements have recently been made in the church of St. Philip and St. James, for Sir John Kennaway, bart. The chancel has been improved by the removal of screens and enclosures. An arch opened in the wall on the north side with vestry beyond it. New seating of English oak is introduced, and a tile floor from Godwin's works. A reredos has been arranged, and the sill of the east window raised. The seating, generally, has been cleaned and varnished. The works have been carried out by Mr. Digby, of Ottery St. Mary, builder; the architect is Mr. Ashworth, of Exeter.

Stoke Canon (near Exeter).—This church has recently been improved in its interior. Some ancient bench-ends, which had been stilted up on blocks to match with framing, 4 ft. high, have been re-arranged, and the whole church reseated with oak, following the style of the old work. The designs of the bench-ends vary, some being adapted from seat-ends existing in the Somerset and Devon churches. The work has been done by Mr. J. Richards; the carving by Mr. Hems and Mr. Sendell; the architect is Mr. Edward Ashworth, of Exeter.

Stafford.—The parish church of St. Chad, Stafford, whose history dates from the twelfth century, has been re-opened after considerable alterations mainly in the way of restoration. In comparatively modern times the aisles and the transept or transepts were destroyed and the west front was partly taken down, the nave arches being walled up with stone which had become weathered before the exterior was cased with brick in the last century. About twenty years ago a movement for the restoration of the church to something like its original state was initiated. The work was commenced in the chancel. On the removal of the brickwork casing on the north side a Norman arcade of six arches was brought to light, and though seriously mutilated, it was found to be capable of restoration. On the south side of the chancel were the remains of a similar arcade and of Norman windows and piscina; but the arcade and windows were in far worse condition than those on the north side. The Norman windows were filled with stained glass; and a three-light east window of stained glass was inserted. The roof and floor of the chancel were reconstructed, and other improvements in this part of the building were carried out. The interior of the tower was also repaired. When relieved from the plaster by which it had been overlaid, the arch leading from the nave into the chancel was found to possess striking features. Examination showed that the north and south walls each contained four Norman arches, and one of these on the south side was restored. Clearstory windows were also discovered. The lath and plaster ceiling of the nave on being removed was found to have concealed a fine oak ceiling in excellent preservation. After some delay the works were resumed. The pillars, responds, and arches of the nave have been cleaned and repaired. The semi-headed windows of the clearstory that were bricked up have been opened out and the stonework renewed. The oak ceiling and roof, which date from the fifteenth century, have been cleaned and strengthened. The style of the nave is "late Norman." The half capitals of the arches next the western wall have carved foliage of the style known as "Transitional." As yet the south aisle only has been built. It has coupled windows in the west and south walls, and an arch at the eastern end that will communicate with the transept. The aisle roof is of plain though massive design, and covered on the outside with Westmoreland slates. The floors inside the church have been lowered, and paved with Minton Taylor's red and black tiles. At present the old seats are fitted up, and chairs provided for additional sittings. The stone used for the new work is chiefly from Weston. Messrs. Farmer & Brindley, of London, have executed the stone carving. The builder was Mr. J. J. Fast, of Melton Mowbray; Mr. G. Clark acted as clerk of the works.

Old Barnet.—The church which stood for some centuries near Barnet-common, and which was one of the oldest in the county of Herts, has been renovated, modified, and partially rebuilt. Some of the old walls and ornamental masonry remain.

ANNALS OF A FORTRESS.

THOSE who have read the section on fortifications under the heading "Architecture" in the "Dictionnaire Raisonnée," will not require to be told that M. Viollet-le-Duc is an authority on that subject as well as on civil architecture. It may not be generally known here, however, that this eminent architect's connexion with military operations has been practical as well as theoretical. "He was frequently consulted by the late Emperor respecting the permanent defences of the country; and it is not too much to assert that if his recommendations had been carried out the investment of Paris would have been rendered impossible, while the progress of the German invasion elsewhere would have been attended with greater difficulties. As colonel of engineers no officer displayed greater energy, skill, or bravery in the defence of the city; and every operation planned and directed by him during the siege was successful." On the signing of the armistice the Germans endeavoured to remove at once the evidences of their plan of investment, but were not quick enough to prevent M. Viollet-le-Duc from having accurately noted the whole scheme. His services were solicited by the Commune, unsuccessfully; but he responded subsequently to the call of Marshal MacMahon to assist in the re-occupation of Paris by the Versailles troops.

Such is the substance of the information given in the translator's preface to the English edition * of the "Histoire d'une Fortresse," in which, as in his little work "How to Build a House," which we noticed a short time since, the author has happily combined practical information with the interest of a narrative. The fortress, of which the story is here told, is an imaginary one; but the map of the site, with the plans and details of the various stages through which the place went in different ages, are given with all the minuteness of a *bonâ fide* military history. We are introduced to the district of Obet, in almost prehistoric times, when it was inhabited by a barbarous but unwarlike tribe, living in dread of the rumoured incursions of a fair-haired race of great stature, who were said to be making their way into the country in great numbers. The district is divided by a river into which a streamlet runs, making the shape of the letter Y, roughly speaking; and between the two forks of the Y is an elevated plateau, steep on three sides, but communicating on the north with open country on nearly the same level. Well, the fair-haired strangers appear, and there is a fight, followed by an amicable arrangement (since that or extermination are the only alternatives), by which the fair-hairs were to reside there and defend the original tribe. This negotiation was entered into on the summit of the plateau, whither the aborigines had fled for temporary refuge; and thus this position came first to be regarded as a kind of *point d'appui*. Two centuries pass, and the land of Obet is now the Val d'Avon, and the plateau is crowned by a regularly-planned enclosure or rampart, a mound based on and tied together by tree-trunks and logs forming headers and stretchers. For the aborigines, many of whom had fled the valley, re-appeared on a day with other spirits like themselves, and made a determined effort to regain complete possession of their old country; and hence the new comers saw the necessity of having some regular and permanent stronghold. And here the fair-haired race, the Gauls, commanded by their handsome young chief Sigild (who is a fine specimen of a born commander,—such a man as Mr. Carlyle would admire), sustained the first siege, which in one point was similar to all that succeeded it; for the natural run of the country has the same effect, broadly speaking, under every system of warfare; and throughout the history the north side, where there is no natural defence of any consequence, is the vulnerable point, and the scene of the principal struggle. Two centuries and a half later, and the curtain rises again on the Val d'Avon, the slopes of the plateau now covered with a thriving town, of wooden or dry-stone walls, and still protected by the rampart on the plateau above, now, however, much in need of repair. Here, however, under the chief Catognatus, a gallant defence was made against the attacks of some of Cæsar's legions, the spirits of the defenders being raised by the accounts which their chief circulated of the wretched, half-starved state of the Roman soldiers,—accounts readily received; for, says the author, "the Gauls have always been inclined to lend a willing ear to representations that flatter their desires, without inquiring whether they are true or false." After the taking of the fortress, Cæsar gave orders for the establishment of a permanent camp on the plateau, which now, however, was divided into two fortresses, north and south, with a *place d'armes* between. And here were first seen scientifically-constructed defences, with ditch and *glacis*, and entrances arranged so as to compel troops who would enter to present a flank to the defenders. But the Roman camp does little work, and three centuries after its ramparts have nearly disappeared, when the Emperor Julian commanded a fortification to check the incursions of the Germans, and hence arose the fortified Gallo-Roman *cité* Juliana, when the plateau was once more walled all round, this time with massive masonry ramparts and innumerable towers, and a citadel or special stronghold at the southern angle, from which a direct communication was carried down the hill to a work commanding the main bridge over the river at the angle of the Y (see fig. 1). At the opposite end, the weak north side, an advanced work was thrown out, which becomes the scene of the most violent struggles of the third siege, when the Burgundians made the place a stronghold against the Franks, and were finally defeated by the latter under the conduct of the Roman military engineer Secondinus, after a most elaborate series of attack and defence operations, by mining, countermining, &c., described in great detail and largely illustrated. The Frank kings destroyed the most important works, but the Roman towers were massive, and two centuries after presented a mass of ruins, the plateau being a waste, and

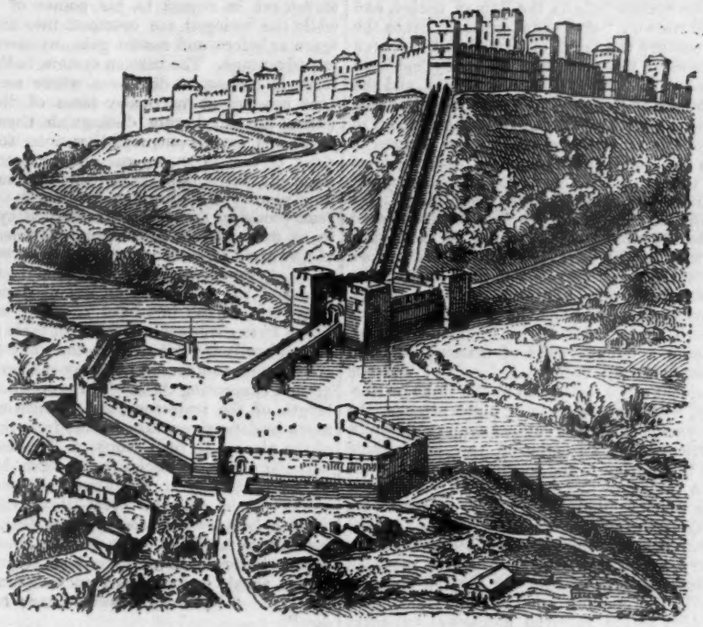


FIG. 1.

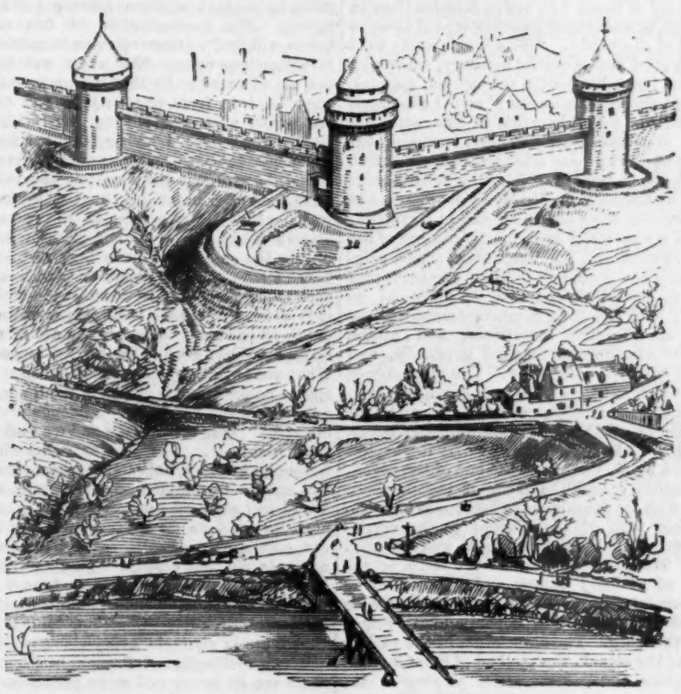


FIG. 2.

* Annals of a Fortress. By Viollet-le-Duc. Translated by Benjamin Bucknall, Architect. London: Sampson Low & Co.

the western declivity supporting only a poor little town.

So the curtain falls on the Roman period, and in 1180 rises on "the feudal castle." Since the ninth century the Lords of Rochepont had been possessors of the vale; and an abbey had been founded on ground adjoining the plateau, and the *cité* Juliana on the slope was once more in existence as the town of St. Julien. The account of the genesis of the new castle; the manner in which the ambition of the young Lord of Rochepont was stirred by his uncle's accounts of the Christian fortresses in the Holy Land; the feminine arts by which the lady of Roche-pont secured the monks of the abbey on their side, that they might raise no political difficulties against the building of the new castle; the wonder of the inhabitants of the town, mixed with consternation, when the great tower at the southern angle, risen 30 ft. from the ground, presented a circular mass of masonry 90 ft. in diameter, are all brought before us; and the subsequent siege operations by the Duke of Burgundy, with the incidents of night attacks, the employment of various engines against the walls, the tremendous struggle on the battlements when the moving tower was brought up to them by the besiegers, are described with a graphic power which reminds one of some of the scenes in "Quentin Durward." Then came, in the fifteenth century, the first defences against fire-artillery, which was at first of course regarded only as a novel substitute for the old catapult method of propelling missiles; and Rochepont and other places received additional outworks round the base of the towers, called *boulevards*, to mount cannon on, as the newest addition to the defences (fig. 2). The fifth siege was carried on by the army of Louis XI., under Messire Charles d'Amboise, against the representatives of Charles the Bold of Burgundy. "The king's army took with it a good and powerful artillery, consisting of twelve large bombards, twenty-four spiroles, veuglaires, and ribeaudequins;" and the besieged were somewhat similarly provided. The castle succumbed eventually, the defenders marching out with the honours of war after a desperate resistance. Next, in 1606, the *cité* of La Rochepont is fortified by Evrard de Bar-le-Duc, "engineer to the most Christian King of France and of Navarre"; and here we have the first commencement of the bastion system, and the illustration of the principle, since paramount in military strategy, that each part should defend and be defended by another; and the first commencement of the system of scientific investiture, and attack by earthworks pushed forward gradually, and mutually covering each other. The character of Forcia, the "red-tape" second engineer, who succeeds to the direction of the siege, and does everything by rule but can make nothing answer, is very good. Lastly, the town of La Rochepont is fortified by M. Vauban at the end of the seventeenth century, and the faces of the northern bastion with its demi-lunes so laid out as to sweep the whole face of the plateau to the north; while each face, in case of attack, was defended by the fire from another face. Here is the system of artillery attack and defence in its first complete form. The town, in 1813, is besieged by the army of Bohemia under Prince Schwartzenberg. The description of the various stages of the attack, the method of planning and constructing the parallels, the placing of the besieging batteries so as to defend each other, and to tell on the weak points of the fortress, and the means by which the attack was again and again met and frustrated, has all the interest of a game of chess on a great scale; which modern war really is. The whole account is illustrated by copious diagrams, plans, and views, and so minutely given as to read just like a veritable history.

The abdication of the Emperor suspends hostilities in this latter case, after the fortress had shown some claim to be considered impregnable except by famine. But, notwithstanding the bastioned inclosure and great outwork which was still existing in 1870, exactly as Vauban had planned it, "the town could not have held out forty-eight hours against the German artillery." And the reasons for this, which are given in some extracts from the papers of a "Captain Jean," who had been engaged as an engineer officer in the late war (and which, it is needless to observe, represent the advanced views of the author), form an interesting study. Captain Jean considers that the immense effect of the long range of modern guns, in changing the conditions of attack, has not been taken into account, or at least not sufficiently realised, in modern theories of defence. The effect is to give the besieger great freedom of choice and liberty of movement in regard to his points of attack, while the besieged are cramped into the same space as before, and cannot gain any corresponding advantage. The bastion system, in Vauban's form, is useless at distances where an enemy does not fire at particular faces of the work (since he can hardly distinguish them), but drops his explosive projectiles into the place *dans le tas*, in a general and indiscriminate manner. What, then, is to be done to meet this new power of long-range artillery? Captain Jean considers that Vauban's bastion system is to be magnified in proportion, and that instead of one great fort, separate forts are to be placed at what would be the salient and re-entering angles of Vauban's bastions, but at distances in proportion to the increased range of artillery. These forts cover each other with their fire, and curtain-walls are not needed, for while the forts are manned and served no army can occupy the ground connecting them. "In proportion to the length of the trajectory, the defence must remove its defensive arrangements from the centre of the place. If each front of Vauban's work was 400 yards, it ought to be from 13,000 to 14,000 yards now." But above all, permanent works should only be established with great caution, because they cost a great deal, and are necessarily familiar to the enemy, who studies them. Future military operations, Captain Jean thinks, should depend much on temporary fortifications. "Vauban's fortresses have had their day."

The permanent and massive fortress, therefore, is to be succeeded,—according to our author,—by the temporary field-work, everything in modern warfare moving quicker than before. The archæologists of five centuries hence will find no massive ruins to exercise their investigations upon. Not a few will be glad if the use of them be by that time a forgotten tale also. Not so feels our author; and his words are worth note, considering the quarter from which they come. Looking from the fortress of Rochepont to-day,—thinking of all the events that this little nook has witnessed, of the ruins that have been accumulated by human passion,—contrasting this with the calm of Nature, with the flowers which have clothed with a mantle of beauty the ruins that have been heaped by the fury of man,—"a feeling of deep sadness comes over us, and we say to ourselves:—'What use is it all?' 'What use!' replies a voice in the depth of our soul, 'What is the use of independence? What good is the love of our country? What use is the memory of self-sacrifice?' War makes nations, and war raises them again when they sink down under the influence of material interests. War is struggle, and we find struggle everywhere. . . . . Whenever what is called fraternity between nations shall become a reality, the reign of senile barbarism and shameful decay will not be far distant." This is outspoken at least; and we do not say that the feeling is not, on the whole, healthier, and certainly more natural than that very puling and pusillanimous view of war which has been forced into too great prominence by such philanthropic writers as Messrs. Erckmann-Chatrian. But if it is true that there is struggle everywhere in life, let us ask our distinguished French brother whether there are no better and more permanent ends of struggle than he has been contemplating,—no higher platform of strife? There will always be struggle; but when the peculiar kind of strife which shows itself in military warfare comes to be discredited, much human energy will be set free for worthier objects. In the meantime, we present to our author and his compatriots, as a kind of counterblast, an old sentiment which has something in it also,—"Better is he that ruleth his spirit than he that taketh a city."

One word more, as to the translation. It is clear and readable, and rendered into good English idiom (which translators from other languages do not always achieve); but it has been very imperfectly revised. The references to the plans are in not a few instances incomplete and misleading; and the translator seems to have got into a muddle with numbers and points of the compass several times. On p. 92 we have "south point" where it should be "north"; p. 134, "the southern ramping wall," where the author evidently must have said "to the south of," or "on the south side of," the said wall; the letters in the text referring to figure 36 are many of them wrong; p. 299, "two pieces" should be "four pieces"; p. 335, "left face of the right bastion" should be "right face," &c.; and others. A little trouble in revising such errors would have saved a good deal of trouble to the readers, who are thus left to the task of correcting the press for themselves.

OPENING OF THE ALEXANDRA PALACE.

THE very orthodox English May-day weather last Saturday did not seem appreciably to check the exodus of visitors for the opening ceremony of the pleasure-palace on Muswell-hill. At all events, the building during the afternoon was almost as full of people as it could be consistently with any possibility of moving about at all; and perhaps it was as well that no unusually fine weather tempted out a greater crowd, who might have found plenty of room in the grounds, if they once got there, but would have found the getting there very problematical; for, as it was, the direct railway service to the Palace seemed to be taxed quite beyond its resources, more than an hour being consumed over the journey from King's-cross, by a process in which the travelling, to put it in an Irish form, seemed to consist almost entirely of stopping. If the Alexandra is to be a popular holiday resort this kind of thing must be amended, for there is a limit to human patience, even on holidays. The alternative of the main line by Woodgreen Station brought the visitor from Scylla to Charybdis, the road from the Palace down to the station being in the condition of a ditch. The next thing to be done should be to "metal" this road; its state on the opening day was,—well, very bad.

The difficulties and disagreeables of transit got over, however, the crowds who jostled each other throughout the building appeared to be decidedly satisfied with the result, and to regard this "second temple" as a great advance on the first, and a place to be decidedly approved of. In regard to the objects of attraction within-doors, there was little to call for comment from us; the proposed sculpture-gallery is at present only nominally so; the picture-gallery we will look to hereafter. One thing, however, we note,—that the building is very well planned for the circulation of large crowds without confusion; no building of this size and extent could well be easier to find one's way about, the main system of the arrangement showing itself almost at once to the visitor entering the building. We must say, also, that the great concert-room, although as we have before observed, the side portions are very much cut up with columns which intervene between the audience and the orchestra, is in regard to the centre block exceedingly successful acoustically; there seems to be no perceptible echo,—at least nothing to interfere with the effect, and the clearness with which a quartette of single voices was heard at the extreme end of the room, even with the continual noise of a moving crowd, was a satisfactory test on this point. The result illustrates what has been urged in our columns and elsewhere, that a long room rather than a wide one is the shape for conveying musical sounds directly and clearly to the ears of a large audience. It would have been better, however, if the back of the room could have been raised to some extent, both for seeing and hearing.

The large attendance at the opening, in spite of the bad weather, may, we hope, be taken as giving a good augury for the future popularity of the Palace, one great attraction of which will be its beautiful and picturesque situation, from which in fine weather the country can be looked over far and wide in all directions. The transit accommodation and the approaches improved, there will be every probability of the Alexandra Palace becoming one of the most acceptable resorts of London out for a holiday.

On the close of the concert the directors entertained very liberally a large number of friends to the undertaking, and tested with satisfactory results the capabilities of the great dining-room.

Monument in St. Paul's.—A memorial of the late Admiral Sir James Scott, K.C.B., has been erected in St. Paul's Cathedral. The monument is in the form of a mural tablet of large size, designed and executed by the firm of Messrs. Alexander, Macdonald, Field, & Co., of Aberdeen. Its character is in keeping with the record of services rendered to the country during the great wars that prevailed from the beginning of the century, and later in China.

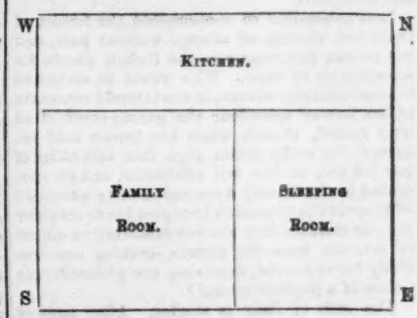
THE WOOD-CARVERS AND CHÂLET-BUILDERS OF SWITZERLAND.

THE beauty of Swiss carvings, and the picturesqueness of Swiss châlets are justly celebrated, and the Anglo-Saxon race has been rendered tolerably familiar with both. In the present days of cheap travel, an immense number of wandering Britons have extended their holiday tours as far as Geneva and Lausanne, and have seen for themselves the quaint wooden dwellings of the mountaineers nestling under the great rocks among the hills, or perched on the sunny elevations on the lake sides; and those who have so seen them have universally felt the additional charm which they lend to the magnificent landscape; and, on closer acquaintance, have admired the simplicity of their design, the tastefulness of their decoration, and the comfortable look which is worn by the majority of them. But, after all, everybody has not been to Switzerland; and there are, presumably, some Englishmen, Scotchmen, and Irishmen who have not even crossed the Channel, or ever heard a Frenchman chatter, or a Belgian drawl, on his native soil. Nevertheless, the most stay-at-home Briton, unless he has persistently kept his eyes shut, can scarcely fail to have a very fair notion of a Swiss châlet, and a Swiss carving. The shop of our so-called "Importers of Foreign Goods" are filled with wooden chamois and châlet-clocks, and other pretty toys of Swiss manufacture, and English publishers and bookmakers can scarcely have left a Swiss woodcut in Leipsic uncopied, or a Swiss gorge or mountain undescribed. The mass of our people are as familiar with Switzerland, as far as a general impression goes, as they are with the highlands of Wales and Scotland; but it seems that, even in the Swiss cantons, it is very difficult to procure accurate information as to the extent of the wood industry, or the steps which ought to be taken to improve and develop it. Although wood-work of all kinds is so thoroughly associated with the very name of Switzerland; when Mr. Jenner, her Majesty's representative to the little republic, was asked by Earl Derby for information on the subject, half a year ago, he was unable from official sources, to derive the required intelligence, and was compelled to send a small library of semi-official works to the Foreign Office, as containing the most practical answers to the very simple queries which were put to him. At the same time, he enclosed with his book parcel a monograph upon several points which are of interest to the trades which we represent, and a summary of which may prove of interest to our readers. For most of his figures Mr. Jenner is dependent upon the statistics collected by M. Salvisberg, for the Vienna Exhibition of 1873; but these may be reckoned as new in this country, and also as nearly reliable. They show that in the year named in the twenty-two Cantons of Switzerland, 1,837 saws were at work in the preparation of timber for various industrial purposes; that there were twelve large establishments for turning wood, three cart or carriage factories, fifteen factories for cabinet-making purposes, and seven large establishments for wood-carving. There were also twenty match factories at Frutigthal, in the Canton of Berne, each employing on an average forty hands, and in Berne and Fribourg two railway-carriage factories with an out-turn of 800 carriages per annum. In addition to all this was the fireside industry of hundreds of people, and the labours of scores of little factories which could not be noted or classified. M. Salvisberg is a severe critic of the handiwork of his fellow countrymen, and while he gives them credit for the utility of many of their productions he is constrained to add:—"Nevertheless, the future of Swiss wood-carving should not lie in the direction of the would-be useful ornaments and common-place toys which have hitherto absorbed the energies of the bulk of the trade; but the artisans should endeavour to apply their skill to the production of furniture and decorative panelling of a high style of art. Such articles, if finished with the care displayed in one or two specimens, would find a market in every wealthy town in Europe, whereas, in the knick-knack line too much has already been done, the stocks are increasing, and not even the never-ending flocks of foreigners that sweep over Switzerland annually will prove sufficient to absorb a constantly renewed supply of Swiss châlets and musical boxes." If the question resolves itself into one of supply and demand, of course, Swiss carvers must leave an overstocked market and seek a profitable sale; but those who saw the more pretentious Swiss carvings at the Vienna Exhibition will remember that there were really "only one or two specimens" of marked excellence, as stated, while almost all the little knick-knacks were good. The Swiss peasant has a most desirable capability of reproducing the objects of daily life with something like veracity, and some workers are startlingly truthful in their representations. But the Swiss seem to be deficient in inventiveness, and it is a pity to advise them so strongly to abandon an art by which they have gladdened European households to adopt a loftier profession for which they have as yet shown no special aptitude. It must be remembered whence multitudes of the pretty Swiss toys come:—"The cowherd and shepherd tending their flocks in the Alpine pasturages, the charcoal-burner watching his fires, and the peasant families sitting round their stoves during the long winter evenings, at the expense of but little physical exertion, add greatly to their store of comforts by a little skill in carving. A very large proportion of the cheaper articles are actually produced in this manner." But these men, women, and children who handle their knives so deftly, and who can so dexterously represent a goat or deer work by old household models as much as by nature, and the goat-maker does not reproduce the deer with equal facility. At best, only the most devoted and careful artisans of Switzerland can hope to excel in pure artistic carving, and even they will have hard competition with men of other races. But we fancy that most practical folks will agree in thinking that an ordinary Swiss carver had better stick to his six or eight francs per diem, and continue to do good work which pleases most eyes, than attempt nearly impossible exploits without fit training, and fail to earn a sou.

Apropos of this point, we may note the parquetrie of Switzerland. Every Swiss house with any pretension to comfort has a parquet-floor in the best room; and, says Mr. Jenner, "the diversity in the patterns is something really astonishing, when the low rates obtaining are taken into consideration." But at the same time he advises that even we Englishmen, whose artistic incompetence used to be proverbial on the Continent, should compete with the Swiss in this branch of industry; for "even if we do not care to manufacture parquets for home use, there is nothing to prevent us, with our advantages, from supplying every foreign nation possessed of a seaport. . . . It is difficult to understand why so little has hitherto been done in this direction. Might it not be worth while to try what would be the effect of the establishment of two sister workshops, under the superintendence of the authorities of the Kensington Museum, the one for wood-carving, and the other for making parquets? The object to be first sought for is not so much cheapness as the production of models superior in design and finish to anything hitherto turned out by foreign manufacturers." It is for English employers and draughtsmen, rather than for the Government, to say whether they can honestly accept the position which it is here suggested that they should assume; but Mr. Salvisberg admits that, although at Venice, Switzerland outstripped her rivals in rapidity and cheapness of production of parquetrie, she was inferior to them in the elegance of the designs exhibited. The manufacture of parquets, although of much more recent introduction, is still more profitable to Switzerland than the wood-carving industry. The trade, which is carried on in eighteen out of the twenty-two cantons, is at present in a flourishing condition, and it is estimated that the annual production of the twenty odd establishments which carry it on reaches the value of 320,000*l*. Prices vary from half a franc to four or five francs per square foot, about a franc or a franc and a half being charged for the common deal sort. The woods most generally used are oak, walnut, pear, plum, cherry, maple, lime, and fir; but fine foreign woods are finding greater favour. The largest factory in the country is that at Interlaken, which is fitted up with costly machinery, and is capable of turning out about 1,500 square feet of parquets per diem, or between five and six millions of square feet per annum.

The fondness of the Swiss for wooden houses is very remarkable, and Mr. Jenner goes so far as to say that "a quasi-religious value" is attached by the people to the châlet system of architecture. A distinguished writer on the subject also holds the opinion that some part of the love of home so characteristic of the Swiss may, perhaps, be due to the carefully-devised and cunningly-ornamented dwellings with which that feeling is so closely connected. In the French and Italian cantons, however, the people are less prejudiced in favour of wooden cottages, constructions of stone and bricks are replacing the former timber structures; and it is probable, that partly through motives of economy, and partly through the influence of their neighbours, the inhabitants of this part of the country will ultimately abandon wooden buildings; but in the German cantons châlets continue to be seen everywhere in their ancient form. There is, of course, considerable diversity in the plans of different châlets; but there are certain great principles which are rarely departed from, which demonstrate the affinity between them and the older style of German peasant's house, of which specimens may still be seen in the Black Forest. This affinity is most clearly seen in the position usually assigned to the living-room, which forms the characteristic feature of the German cottage. This apartment is almost invariably placed in the southern corner of the house, so that the sunshine, admitted by numerous contiguous windows pierced in the walls adjacent to the corner, falls in a warm reviving flood on the table which is placed there. Round this table the family gather to eat and to work, and there they have full enjoyment of the sunlight from morn till even. Benches fixed to both of the sunny walls under the windows, which have small compartments which can readily be opened, and which generally command beautiful views, enable the sitter to enjoy the landscape, while at the same time it is easy, merely by turning the head, to keep an eye on the proceedings of the other persons in the room. The windows are generally latticed, and the projecting roof shelters the interior of the apartment from the glare of the noontide sun. Not only is the symmetry of the frontage sacrificed to this arrangement, but not infrequently in the villages houses will be met with which, with a total disregard of the street line, crane out in front of their neighbours for a freer view. In the corner opposite to the windows in the living-room is the huge tiled stove, and close to it are the steps, which lead through a trap-door to the great upper room, and which serve as convenient seats during the winter. This same loft is warmed by the stove and the lowness of the apartment itself; the panelling of the walls and ceiling and the stout boarding of the floor combine to render the family-room cosy. In a third corner of this household meeting-place stands the immense dresser or sideboard, provided with open and locked compartments, and a flap which serves as a wash-table. A clock usually completes the furniture, which only differs in the poorer and richer dwellings in the lesser or greater amount of carving which adorns the panels and furniture.

The square family-room regulates the whole plan of the building. The rest of the frontage is taken up with the sleeping-apartment, which extends to the same distance rearward; and the long kitchen which runs behind both completes the ground plan.



The kitchen fire-place is placed immediately behind the stove in the family-room, and sometimes the same chimney serves for both, but in the humbler châlets the kitchen-smoke is often left to find its way out of holes left purposely in the roof to which a part of the partition wall extends. On the south-west and north-east sides of the house are steps which lead up to two opposite entrances to the kitchen, which are protected by the projecting roof. The peasants who are least sensitive sometimes enclose the spaces below the landings of these staircases, and utilise them as pigsties, while economical and more cleanly folks convert them into wood stores. Flights of steps lead from the kitchen downstairs to the cellars and upwards to the

two front rooms under the gables, and to the two covered-in balconies on the sides. The front of the house is often elaborately carved; the back part is usually left bare. Many châlets have only a ground-floor, divided as above described; those of two floors are not uncommon, and there are instances of châlets with three floors. Much naturally depends on the comparative wealth of owner and tenant, but the model châlet has only one floor. Mr. Jenner says: — "Occasional châlets are to be met with here and there, constructed on a totally different system, as, for instance, with the kitchen in the centre of the house, lighted from above; or, as in the Bernese Oberland, where, when two families live in one house, which is often the case, the châlet is divided down the middle, the partition wall subtending the point of meeting of the sloping sides of the roof. It is in such double châlets that the finest specimens of huge gabled fronts, twice the length of the sides, are to be met with, richly and fantastically decorated."

Châlets are constructed in three different styles,—two of great antiquity, the third the result of modern necessities. First is the block-house châlet, which is generally raised considerably above the ground on stone foundations. The walls, projecting one beyond the other, are constructed of stout planks of fir or larch, fastened by means of wooden pins. Of later date, apparently, are the châlets of the frame-house style, which are built of stout oaken posts, grooved to receive planking, which is secured by cross pieces and bolts. The most modern style is the trellis-work or panelled châlet, which was introduced from North-east Switzerland about the beginning of the last century, in consequence of the enhanced price of wood, and has entirely superseded frame-work houses in the Zurich district. This less attractive kind of châlet is erected on high foundations, from which a series of light beams, interlaced so as to form a sort of trellis-work, rise up vertically and diagonally to support the overhanging roof, the spaces between the beams being filled with rubble and plaster-work. Mr. Jenner's last words are well worth noting,—"I was informed that there would be no possibility, or even if there were, advantage, in introducing buildings similar to the Swiss châlets for the accommodation of agricultural labourers in England. They waste an enormous quantity of material, and in damp situations are not over-healthy. This is the opinion of one of the most competent authorities of Switzerland."

FROM ROME.

THERE are two ways in which the old things of Rome are becoming new; firstly, by means of the undemonstrative but ceaseless renovations carried on by the municipality and travellers of the city; in which case, alas! it can be said to be renewed only after the manner of the sophisticated ship of the Greek schools and secondly, by means of the new light thrown, from time to time, upon the remains of antiquity, through the labours of resident archæologists.

It is impossible to contemplate the former of these two sources of change without pain, and yet no one can reproach the Italian people for allowing it to exist. Who would be surprised that an unhappy woman, in the tattered remnants of her former splendour the gazing-stock of all who passed, should, when her better soul returned, lay aside silken rags, that told alike of her fall and of her evil exultation, and sit contented in the homely dress her poverty afforded? Who would be so mad as to expect her to consider for one moment that she was removing an object of interest from the streets, making one less study for the artist, depriving the philanthropic palate of a piquant morsel?

The case of Italy is similar. After ages of subjection which have failed to efface the noble instincts of her people, she has newly risen to freedom, both temporal and spiritual, and she sets out, with the sympathy of all good men, to regain the height of Roman greatness, not by using its memories as a lure to the stranger, but as an example and incentive to herself; preserving them, as long as she can do so without impeding her career, and casting, of her want, much into the treasury of monumental history. Nor should the comparison be thought too harsh; for what is it that is being swept away? Not the sombre grandeur of the Pagan city, but the encrustations of the Papacy, its squalid art and strange fables.

It is proposed to give, briefly, some account of Rome, with a view, especially, to the changes material and mental which the last few years have produced, and to take first the Colosseum, the best known perhaps of Roman antiquities, leaving the agents in the work of mutation to be noticed at a more convenient time, when the archæologists have brought their season to a close, and the civic authorities are resting from their work.

It must be owned that the feelings produced in the mind of your correspondent by his first sight of the Colosseum were those of disappointment and chagrin. He was not prepared, or even inclined, to deny that it was a most stupendous mass of building; but the epithets which he had seen piled upon it, by authors ancient and modern, were so much more stupendous that they dwarfed the reality to a most unfortunate degree. Suetonius was, we hope, the first to adopt this immense style of description, when he compared the *stagnum* of Nero to "a sea surrounded by the buildings of a city"; but the writer in Murray's handbook for 1873 was not the last, though perhaps the most ingenious, when he wrote, "There is certainly no building of which the descriptions and drawing are so much surpassed by the reality."

But besides inflated accounts there is another cause at work here which detracts from the optical effect of all constructed objects, namely, the want of scale produced by the unvarying largeness of dimensions and breadth of treatment which obtain throughout. The houses are extremely lofty, and the rooms they contain are in proportion; the obelisks, which appear very little things, measure from 50 ft. to 140 ft. in height; the fountains and churches correspond, and it is only by some chance that one is now and then reminded that he is in the land of architectural giants. A man stopped in the *Via della Muratte*, unable to determine to what genus an animal belonged which was resting on the hand of one of the Tritons, who look so unhappy among the rocks of the *Fontana di Trevi*. As the sun shone upon it, it reminded him of the golden bird of his childhood, from whose decapitated trunk was wont to pour a stream of ephemeral sugar-plums. Presently it rose on the wing, and, passing close beside him, was easily recognised as one of those large pigeons which make their nests in Rome.

In like manner, when the Colosseum was illuminated a short time since, in celebration of the two millions, six thousand, two hundred and eighth anniversary of the foundation of the city, the doves, fluttering about in the lurid light, appeared like nothing else but bats of fire, and might well have been mistaken for wonderful pyrotechnic contrivances. But to return. Many on visiting Rome have known great disappointment at first, succeeded by full satisfaction, as the true sublimity of the place grew upon them; and now that Time has worked, the amphitheatre appears as an exceedingly great building, in picturesque decay, teeming with matters of interest to the archæologist and architect, to the philosopher, historian, and Christian,—"A noble wreck in ruinous perfection."

This *picturesque* decay of the building has been impaired, and—for the non-professional observer the charm of the scene very much lessened—by the removal of the cross from its centre, and the altars commemorating the *Via Crucis* from the lowest arcade; but most of all by the "weeding up" of trees and flowers for the preservation of the ruins and the carrying on of the excavations.

The cross—the municipal guards now supply its place—had stood since 1749, a dreaded sentinel preserving the ruins from spoliation. As early as 1675, Clement X. founded a chapel for the same good purpose. The destruction of the flowers is much to be lamented, as they were of even more than sentimental interest (Professor Sebastiani, in his "Flora Colisea," enumerates 260 species of plants found on the site; and Dr. Deakin, in his "Flora of the Colosseum," increased the catalogue to 420); but, with regard to the trees, we may feel that we bowed to Necessitas alone, she whom Jove himself obeys. Byron says,—

> "The trees which grew along the broken arches
> Waved dark in the blue midnight;"

but as their waving was likely to make "the broken arches" still more broken,—a fact which, of course, did not strike his lordship in those pre-scientific days, — upon consideration we shall admit with humility,

> "'Tis better thus."

It is unnecessary to do more than remind those interested in these matters of the well-known measurements and capacity of the building. "The height of the outer wall is 157 ft.; the major axis of the building, including the thickness of the walls, is 584 ft.; the minor axis, 468 ft.; the length of the arena is 278 ft.; the width, 177 ft. The superficial area is nearly six acres. The number of spectators who could be seated is estimated at 87,000, without including several thousands who had standing-room on the highest terrace."

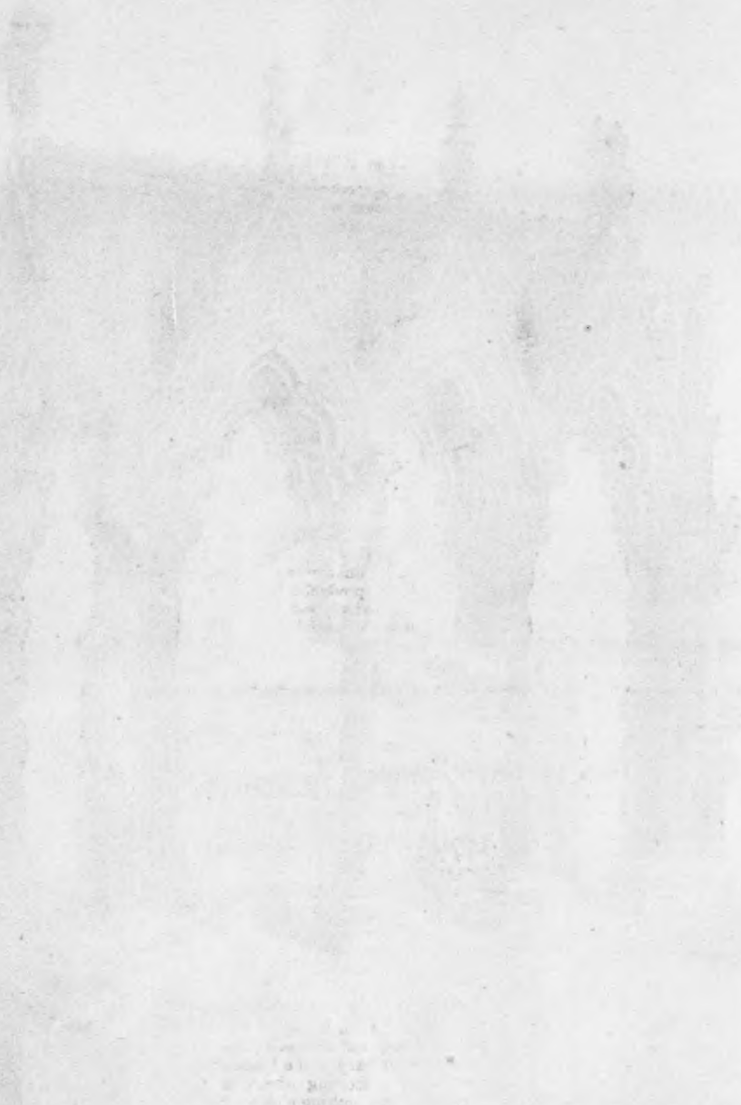
The history of the Colosseum is still to some extent a matter of dispute. The very name by which it is now known is not that by which it was originally designated, and it is uncertain when the word Colosseum was first applied to it, or why. Some say because it stood in proximity to the Colossus of Nero, the huge pedestal of which is still to be seen; but this did not appear quite satisfactory,—in fact, it was rather too much like the prevalent idea that the part of London known as the Adelphi is so called on account of the theatre which stands hard by,—and others have adopted the more evident explanation that the name referred to the great size of the structure, which supposition is borne out by the fact that the amphitheatre of Capua, being very large, is also called the Colosseum.

The date, too, so long received for the commencement of the Amphitheatre is now disputed, and the schismatic certainly appears to have logic on his side. It is usually stated to have been *commenced* by Vespasian in A.D. 72 on the *site* of the *Stagnum Neronis*, which was hitherto thought to have been merely a lake among the pleasure-gardens of the Golden House; but the theory, founded upon most arduous research, which Mr. J. H. Parker advances, and in support of which he adduces convincing evidence, is that the Stagnum Neronis was the Naumachia (reservoir for naval fights), which we are told by Suetonius Nero made, together with a Gymnasium, in connexion with his great palace.

It is highly improbable that this building,—the Naumachia and Gymnasium,—should have left behind no remains to indicate the site on which it stood; and yet though every yard of the part of Rome around the palace of the Cæsars was excavated in the seventeenth and eighteenth centuries, and more recently, nothing of the kind has been found except what is contained in the Colosseum. In that place, on the other hand, and in its inner tiers there are several arches in the well-known brickwork of the time of Nero, with unmistakable signs of the great stone arcades having been built against them; there being no bond between the brickwork and stonework, and the bricks being in many places actually cut to make way for the stone piers. This fact, and the statement above quoted that the Stagnum resembled a sea surrounded by the buildings of a city, with other collateral evidence, brings Mr. Parker to the conclusion that Nero made a large oval reservoir on this spot adjoining his palace, supplied by an aqueduct, remains of which are still to be seen; that to include the Gymnasium in the same building he made a wooden floor over the reservoir, which could be removed and put back again at pleasure, and which, when covered with sand, became the *arena*; that around this great oval basin galleries, chiefly faced with brick, were erected for the spectators, and were gradually increased in number; lastly, that the great stone arcades of the Flavian emperors were built *round* these older galleries, thus being on the site belonging to the Stagnum Neronis, but not upon the site where the Stagnum Neronis once had been.

Mr. Parker gave a lecture last week, and ventilated his opinions of that subject during the course of it, but unfortunately, owing to the compulsory handing round of photographs during the reading, and the desultory interruptions of a gentleman in a white necktie, it was almost all lost upon your correspondent, who, however, believes he has given a right exposition of the views of the learned gentleman, having known something of them before, and which may be summed up in a very few words, to the effect that the Colosseum was not commenced by Vespasian in A.D. 72, but by Nero about A.D. 55, and that the building of Vespasian was an addition to that of Nero.

In the next letter it is proposed to continue these notes on the Colosseum with more direct reference to the architecture of the building.



PROPOSED MONUMENT TO BISHOP WILBERFORCE IN WINCHESTER CATHEDRAL.

SIR G. G. SCOTT, R.A., ARCHITECT.

THE PROPOSED MONUMENT TO BISHOP WILBERFORCE IN WINCHESTER CATHEDRAL.

THIS design is in some degree founded on that class of Mediæval monument best represented, perhaps, in this country by that of Archbishop Walter de Gray at York. It differs, however, from that type in the canopy being distinct from the altar tomb which it overshadows.

It was designed with the idea of a degree of sumptuousness of material and execution which, however justly demanded by the distinguished talents and merits of the prelate to be commemorated, has been negligently ignored by his professed admirers, each of whom seems to have flown off to some scheme of his own, and endeavoured to make the great bishop's memory a peg whereon to hang his own pet project. So much has this been the case that a jocose dweller in the diocese expressed his expectation of hearing that some admiring cleric was raising funds for decorating his own drawing-room as a memorial of the deceased prelate!

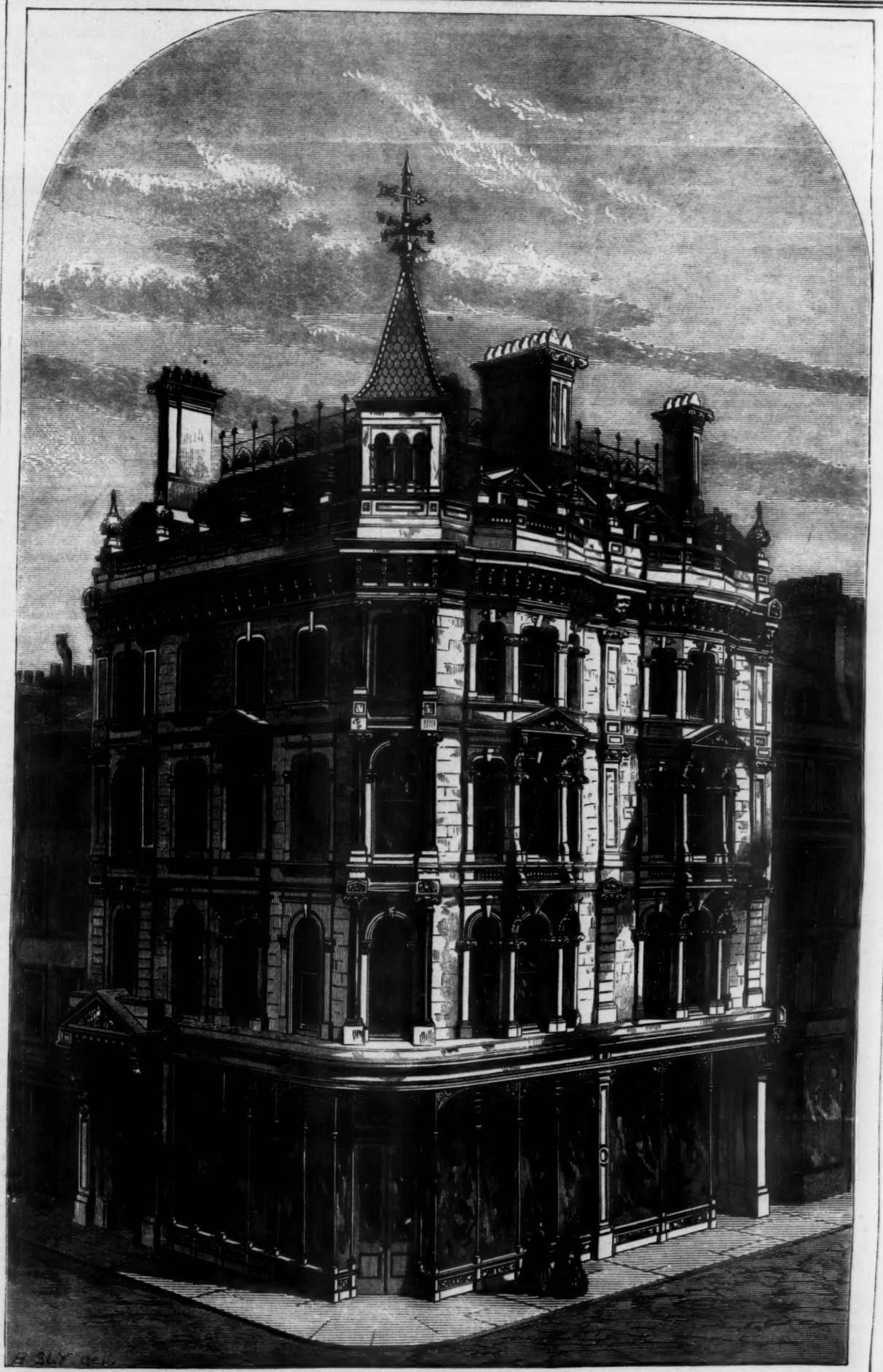
Be this, however, as it may, the true idea of a monument, pure and simple, to the bishop in his own cathedral, has to go, in vain, a begging. It was to have been of alabaster and marble, but must rest content for the most part with plain stone; its inlayings and mosaic pictures will exist only upon paper; and the architect, Sir G. G. Scott, R.A., must rest satisfied with his good intentions, unless disposed himself to pay for their realisation. The monument, thus shorn of its beauties, will be placed on the north side of the presbytery, against the screen which separates it from its aisle.

NEW SHOPS IN OXFORD-STREET.

THE new buildings just completed at the corner of Oxford-street and Holles-street have been erected for Mr. Thomas Brandon; Messrs. Tolley & Dale being the architects; Messrs. Newman & Mann, contractors; and Mr. Hibbins, the clerk of the works.

There are private entrances to the upper floors of both houses, and the kitchens are in the top floors. The fronts are of Bath stone, with Portland-stone cornices, strings, and projections, and red Mansfield shafts to the columns. The cantilevers to the main cornice are in terra-cotta, and the panels between in red Mansfield stone.

The whole of the carving was carried out from the designs of the architects by Mr. Sansom, of Kennington-road; and the ornamental zinc-work by Messrs. Ewart, of Euston-road.



LONDON STREET ARCHITECTURE: SHOPS IN OXFORD STREET.—MESSRS. TOLLEY & DALE, ARCHITECTS

PUBLIC HEALTH AND PUBLIC FILTH.

THE knowledge that filth and disease are inseparably connected is as old as the oldest history. The Biblical injunctions against uncleanliness, and the elaborate ceremonial ablutions enforced on the Jews, are sufficient proof that, even among a people miraculously preserved, sanitary precautions were looked upon as inseparable from a state of health. If, among a limited population, travelling in an open country, living almost entirely in the open air, and never long in one place at a time, when these ordinances were given, such minute precautions were necessary, the vast importance of cleanliness among a population in cities pent, and closely packed, as the English people are cannot be overrated.

The very nature of our mode of life, and of many of our manufactures, is such as to prove the necessity for even more stringent precautions against disease; and one of these, the most fruitful source of sickness and death, comes strictly within the province of the architect and builder.

We allude to the arrangements for the disposal of sewage and house refuse. However magnificent the exterior of a house, however comfortable its interior arrangements, and however luxurious its fittings and decorations, a slight flaw in the construction and position of an unseen pipe is sufficient to render it uninhabitable. We have lately had a marked instance of this in the fact that some of the offices in the new Government buildings in Whitehall,—that most recent addition to our fine specimens of street architecture,—cannot be occupied on account of an escape of sewer gas. But instances of this kind might be multiplied wholesale; and still we find many buildings daily erected without sufficient attention to this vital point.

In a recent report of the medical officer of the Privy Council and Local Government Board special reference is made to the evils arising from defective drainage. Mr. Simon speaks out boldly against the neglect of proper precautions and of the serious results of such neglect, and preaches a sermon on filth which ought to be read by everybody.

Many of these Government blue-books contain abundance of useful matter, which, although published at an absurdly cheap price, is not generally read, on account of the proverbial dryness of such documents. We make no apology, therefore, for referring at length to this particular Report, and that, too, notwithstanding it has all been said in our pages before.

Abundant plans and drawings of various devices for the removal of excrementitious matter and the disposal of house refuse are given, which are worthy of careful study; but the point which principally affects us at the present moment is the formation of drains and sewers within houses.

Builders and others will do well to take especial note of the following rules laid down after careful scientific research, and after full proof of the loathsome diseases which are to be met with, either openly working their way, or killing, unseen and unsuspected, hundreds and thousands of human creatures.

No premises ought, either through water-closets or in any other way, to be brought into drainage connexion with common sewers unless they can be made reasonably secure against the dangers of sewage infection. Part of such security would consist in the fact of the sewers themselves being of such a kind, and in such a state, as they should be, especially with regard to scouring and ventilation; but a further very essential part would depend upon the proper situation, construction, and keeping of the drains and drain inlets of individual premises. In this latter respect the following conditions ought to be insisted on:—

That every private drain be properly trapped and ventilated in relation to the common sewer, and be itself also properly constructed.

That every private drain having inlets within a house have ascending from its head or heads into some suitable high position in the open air, and where it cannot infect the interior, a ventilating pipe, or ventilating pipes, of sectional area amply proportionate to its own.

That all slop-water pipes from within houses be provided at their sinks or other inlets with fixed traps; but further, that, as far as practicable, they be separated from privy pipes, and made to and open over trapped drain gratings outside the house, not direct into privy pipes or drains.

That no overflow-pipe from any cistern which furnishes domestic tap-water, nor from any cistern inside a house, be allowed to open directly into any drain or privy pipe, but be made (as above) to end open in the outer air.

That in cases where water-closets are supplied on a "constant" system, and where generally there will not be storage cisterns, the entrance of privy air into water pipes be prevented by the adaptation of special service-boxes (which also will act as waste-preventers) to all such privies as have not cisterns.

There are localities where the supply of water-closets is either impossible or undesirable, but wherever they exist they ought to be placed where they can have outside windows, and ought not, under any circumstances, to be placed in or near an ordinary room. The best position for them is near the top of the house; but, on whatever floor, they should, if possible, be built in a projection, and not in the body of the house, from which they should be divided by windowed lobbies.

A very large danger to the public health, and particularly to the better-off classes of society, has of late years consisted in the recklessness with which house-drains, receiving-pipes from water-closets, sinks, cisterns, baths, &c., in the interior of houses, and often actually within bedrooms, or the adjoining dressing-rooms, have been brought into communication with sewers. Among architects and builders there seems to have been very imperfect recognition of the danger which this arrangement must involve, in event either of unskilful first construction, or of subsequent mismanagement, or want of repair. Then, in regard to construction, an almost unlimited trust has been placed in artisans who not only could hardly be expected to understand certain of the finer conditions (as to atmospheric pressure) which they had to meet, but who also, in not a few instances, have evidently failed to apprehend that even their mechanical work requires conscientious execution.

Demerits in existing sewers can in some essential respects be judged by common observation. As the object of a sewer's existence is to prevent the stagnation of filth in and about houses, and frequented places, and to guard against the dangerous pollution of air and soil, which the filth, if not effectually conveyed away, must occasion; so, of course, any sewer which itself occasions any such stagnation and pollution is (in proportion as it does so) unsuccessful; and a sewer which stinks at its open gratings is, *pro tanto*, giving evidence of such unsuccess. The indispensable conditions of success in a sewer are, first, that the flow of sewage to its outfall shall be, as perfectly as possible, continuous and complete, and scouring, not ponded and leaking, and depositing; and, secondly, that the sewer shall have perfect ventilation.

On the question of the disposal of ordinary house refuse, Mr. Simon says:—"There are houses, there are groups of houses, there are whole villages, there are considerable sections of towns, there are even entire and not small towns, where general slovenliness in everything which relates to the removal of refuse-matter, slovenliness which in very many cases amounts to utter bestiality of neglect, is the local habit; where within, or just outside each house, or in spaces common to many houses, lies for an indefinite time, undergoing fœtid decomposition, more or less of the putrefiable refuse, which house-life, and some sorts of trade-life produce; excrement of man and brute, and garbage of all sorts, and ponded slop-waters, sometimes lying bare on the common surface, sometimes unintentionally stored out of sight and recollection in drain or sewers which cannot carry them away; sometimes held in receptacles specially provided to favour accumulation, as privy-pits, and other cesspools for excrement and slop-water, and so-called dust-bins receiving kitchen-refuse and other filth. And with this state of things, be it on large or on small scale, two chief sorts of danger to life arise; one, that volatile effluvia from the refuse pollute the surrounding air and everything which it contains; the other, that the liquid parts of the refuse pass by soakage or leakage into the surrounding soil, to mingle there, of course, in whatever water the soil yields, and in certain cases thus to occasion the deadliest pollution of wells and springs. To a really immense extent, to an extent indeed which persons unpractised in sanitary inspection could scarcely find themselves able to imagine, dangers of these two sorts are prevailing throughout the length and breadth of this country, not only in their slighter degrees, but in degrees which are gross and scandalous, and very often, I repeat, truly bestial. And I state all this in unequivocal language, because I feel that if the new sanitary organisation of the country is to fulfil its purpose, the administrators, local and central, must begin by fully recognising the real state of the case; and with consciousness that in many instances they will have to introduce for the first time, as into savage life, the rudiments of sanitary civilisation."

ARTISANS AND LABOURERS' DWELLINGS BILL.

THE following petition of the Council of the Social Science Association to the House of Commons has been presented:—

"Showeth,

That the Council of the Association has observed with much satisfaction the introduction into your honourable House of 'A Bill for Facilitating the Improvement of the Dwellings of the Working Classes in large Towns," a subject which has on several occasions been discussed by the members of this Association.

That in the opinion of this council there are various portions of large towns situated in such a way and so densely inhabited as to be highly injurious to the moral and physical welfare of the inhabitants.

That in a sanitary point of view there are numbers of houses in many large towns so closely built and so ill-constructed and inadequate to the proper domestic wants and conveniences of the occupants, as also by the reason of the want of light, air, and ventilation, as to be wholly unfit for human habitation.

That the existence of such buildings in closely-confined districts tends greatly to produce fevers, diseases, and sickness, and an increased death-rate.

That such portions of large towns should be reconstructed, and buildings erected suitable for the dwellings of artisans and labourers who may be displaced in consequence of the demolition of unwholesome houses.

Your petitioners therefore urge that your honourable House will be pleased to enact into law the provisions of the said Bill, with such amendments as in the opinion of your honourable House may be thought desirable.

And your petitioners will ever pray," &c.

The following amendments, prepared by the joint Committee of Health and Economy, were forwarded with the petition:—

"That in clause 4, instead of twenty persons, a considerably less number would be sufficient.

That this committee does not consider it desirable to ignore the action of district Boards or vestries, as proposed by the amendment of Mr. Cross (clause 4, page 2, lines 39 and 40).

That clause 5 should be so amended that accommodation for the displaced working classes should be made before any demolition of buildings take place. Such accommodation shall be provided within any limits which may be considered desirable by the local authorities, and shall provide for proper sanitary arrangements.

That it is desirable to extend the application of Mr. Cross's amendment to clause 5, by incorporating that part of Mr. Shaw-Lefevre's amendment to clause 3, which relates to the increased value which would accrue to surrounding land.

That this committee is of opinion that the clauses as to arbitration are calculated to press heavily and unduly on owners of small property. They are of opinion that arbitrators should be appointed, with an umpire, in the usual manner, and the award should be final; but should either party fail to appoint an arbitrator, or the arbitrator fail to appoint an umpire, then the case should be submitted for the decision of the County-court judge of the district.

That this committee recommend the council to petition Parliament in favour of the Bill, and that the petition be forwarded to the right hon. R. A. Cross, Secretary of State for the Home Department, together with a letter, asking his consideration of accompanying amendments."

CONCRETE BUILDING AND PATENTS.

SIR,—I have been a subscriber and reader of the *Builder* for many years,—have followed your lessons and teachings closely. I have been much interested lately in the discussions relating to the construction of concrete buildings, and of fire-proof work generally.

I am a little surprised at times to read the discussions of various of your scientific bodies as to the feasibility of certain works or processes. As to concrete work, it is as old almost as "the hills," but the processes may be different at the present time. My experiences lead me to decide upon the almost universal use of concreted work in the construction of buildings, having in view the proper selection and compounding of materials, and as a matter of course relying upon the materials being properly placed in the construction. If all this "work" is done

under proper superintendence, then I claim that concreted work is reliable, can be produced with an artistic facing, and at quite economical prices.

Some seem to be undecided about this class of work. I see by January's *Builder* that a church constructed with brick facings and concrete interior is described, with the mode of producing the work. I enclose a slip circular which describes a mode I have used for some time to construct walls of brick or concrete; it is very simple and effective, and no doubt when fully explained in all its various uses it will be found worthy of general adoption.

All of these printed sketches I have patented, or have under examination for patents, in the United States. Your laws are so peculiar in relation to patents that so far I have not introduced my views into Great Britain. I believe that every person is entitled to the "fruit of his brain," and although I have not applied in Great Britain for such a protection, yet I rely on the honour of the people to give me at least credit for my work, and protection for any rights I may be justly entitled to.

I speak thus, as I understand the patent laws of Great Britain permit any applicant to receive, or rather demand, a patent, whether such party is the original inventor, attorney, or "not." This is certainly unjust, and should be changed, giving only to the original inventor or his attorney.

We can "produce" one work for two years, and rely on the protection of the Government by patent if we desire it; if not, the work is considered free to the use of the public after that time. This seems to me to be fair on all sides.

A. DERROM.

Paterson, New Jersey.

*** It may be useful to Col. Derrom if we mention that we do not find anything shown by the engravings sent which is unknown in England.

WEST-END THEATRE AND WINTER GARDENS FOR EDINBURGH.

THE vacant stance in Castle-terrace, between Cornwall-street and Cambridge-street, extending to about 300 ft. in length by 160 ft. in breadth, is fixed upon by the promoters of this undertaking. The promoters of the theatre-company, the capital of which is to be 65,000*l.*, provisionally acquired the site in Castle-terrace from the proprietor, Mr. Gowans,—it being part of the agreement that the elevations for the building should be prepared by that gentleman, while Messrs. Pilkington & Bell, architects, were to design the plans for the interior. The difficulty between the promoters and the Grindlay Trustees, the superiors of the ground, having been got over in a satisfactory way, no delay occurred in taking possession, and preliminary operations are being proceeded with apace. The style of the building is similar to that of the houses at the south end of the terrace; and while it has about it a resemblance to the Italian, it is, we believe, the result of working upon geometric lines, the whole being multiples of a given figure. The principal elevation, which faces the east and will be seen from West Princes-street, is to be two stories, or 50 ft., in height; the striking features in the design being four crown-capped towers, the two taller rising in the centre above the main entrance to the height of 150 ft., and the other two,—one at each end of the building,—to an altitude of 100 ft. The parts of the building between the towers are recessed, and in these a balcony with open balustrading is introduced with good effect. At the eaves of the roof a massive corbelled cornice is carried round the building, and this is surmounted by a pierced balustrading, upon which, at intervals of 16 ft., will be placed figures of the Muses and other allegorical characters. The range of windows on the two floors form a sort of arcading, being for the most part semicircular in style. The two towers in the centre are square to the parapet; afterwards they are carried up in octagonal form, and are each capped by a device in masonry representing a regal crown. The towers at the angles are octagonal from the base, but are finished off in a similar manner to those in the centre. A feature has been made of the entrance between the central towers. Over it will be a balcony with ornamental vases in stone at each side, and surmounting the whole a group of figures representing "Comedy," "Tragedy," and "Music." The fronts to Cambridge-street and Cornwall-street are in the same style as that to Castle-terrace,—the balustrading there being also surmounted by figures indicating the uses to which these parts of the building are to be put. The stone to be used in its construction will be from the Bannockburn quarries, which is yellowish or cream-like in colour.

The plans for the interior of the building have been prepared, as we have already indicated, by Messrs. Pilkington & Bell; and in order to make the place one of the most convenient and suitable that could be contrived, the architects have visited the principal theatres and opera-houses in England and the Continent, and endeavoured to combine what they considered the excellent features of each in their designs.

THE NEW SOUTHMINSTER THEATRE, EDINBURGH.

EXCAVATIONS were formally commenced on the 19th ult., in the presence of Mr. Levy and a number of his friends and well-wishers, for the new Southminster Theatre, which is to take the place of the one which was destroyed a few weeks ago by fire. At a social gathering held immediately afterwards, "Success to the new theatre" was proposed by Mr. Samuel Aitken, and cordially responded to. Mr. Levy, in reply, said that he had catered for the amusement of the public for a number of years, and he thought, upon the whole, he had given satisfaction. In the new building he hoped to surpass his former efforts. The new theatre will be 140 ft. long by 80 ft. wide, and will be capable of comfortably seating 3,050 persons. The interior which is to be decorated in the Greco-Italian style, will be subdivided in the usual way, the stall accommodation being for 300 persons, the pit for 1,200, the circle and boxes for 300, and the gallery for 1,200. The stage will be 45 ft. by 80 ft.; and all modern appliances will be introduced in connexion with its machinery and appointments. The roof, which rises to the height of 40 ft. from the floor, will be constructed for the most part of iron, so as to obviate as much as possible the risk of fire. The walls of the theatre will be of a substantial character—of stone, we believe, to the first floor, and above that of fire-clay brick with stone facings. The entrance will be, as formerly, by a corridor to Nicolson-street, which will be considerably shorter than the old one, as the front of the new building will be nearer the street. The drawings are being prepared by Messrs. Clunas & Soy, architects, and it is expected that the new Southminster Theatre will be ready for occupation in November. The building is estimated to cost between 8,000*l.* and 9,000*l.*

WILTSHIRE MONUMENTS.

SIR,—In the interesting article on the "Preservation of Monuments Bill," with which opens the *Builder* of Saturday, April 24th, occurs the following passage:—

"The remaining monuments named are in Wiltshire, viz., Stonehenge, Avebury; West Kennet barrow, Silbury Hill; the Devil's Den, near Marlborough (where a dolmen only is named, but where exist the remains of a city, as is also the case at the unmentioned spot in the vicinity called the Grey Wethers); and Banbury Castle."

Will you look leniently on an inquiry from a late and uninstructed recruit of the "British Archæological Association" as to the remains of cities near the "Devil's Den" and the "Grey Wethers."

From the presence at each of these places of considerable tracts of much weathered stones, I am led to hazard a conjecture that these may be regarded as having at one time had a structural purpose; or are there earthworks at either spot exhibiting traces of early habitation?

If the latter, I am sorry to say that my attention has never been directed to the excavations, while the boulders of "Sarsen" stone (as is the local name) are always regarded here as of natural origin.

I shall be very grateful if you will let me know what are the indications of ancient cities in these two dips in our Marlborough Downs.

R.

*** The common Wiltshire notion of the "native" origin of the "Sarsen" stones (which is found in a little book on Avebury) seems geologically impossible. These fine building stones have been brought from some very great distance, though the source is as yet unknown.

The possibility of ice drift exists; but even in that case the collecting, no less than the uprearing and working of the stones, is human work.

At the "Grey Wethers" exists a large group of these stones, for the collection of which, in the locality, no rational cause can be alleged, except that of a collection of dwellings.

At the "Devil's Den," not only does the same remark apply, but traces of lines of wall, and of others at right angles to them, may be seen. A careful survey, say on the scale of 1 in. to a chain, would probably make the plan of houses or of chambers quite evident. It would be quite as sound to attribute the dolmen in this spot to "natural origin" as the collection of building stones. Still we speak with all deference; for our correspondent, notwithstanding his modest tone, knows something of the subject.

LAYING OUT THE HATCHAM ESTATE.

NEW SCHOOLS, A CHURCH, AND OTHER BUILDINGS.

IN last week's *Builder* we gave a descriptive notice of the conversion of Aske's Almshouses at Hoxton into new and spacious schools for the education of some 500 children, under a scheme of the Endowed School Commission, which was some time ago sanctioned by Parliament. In addition to the Hoxton schools, which are intended mainly for the children belonging to the labouring classes in the district, the scheme of the Commissioners also provided for the erection of new middle-class schools in some part of the metropolis by the Haberdashers' Company, who are the trustees and managers of Aske's Charity, the annual income from which has now increased to a very large amount. The accumulated funds of the charity have, indeed, become so large that some time ago the Haberdashers' Company purchased what is known as the Hatcham Manor Estate, containing an area of upwards of 200 acres, and they are now engaged in laying it out for buildings and residences. It is upon this estate that large and ornamental new middle-class schools are now in course of erection, and almost completed. There are two distinct buildings, one for 300 boys, and the other for an equal number of girls. It may be stated that the site upon which the schools are being built occupies unusually high ground. The main approach to the estate is opposite Newcross-gate, at the junction of the Queen's-road and the Old Kent-road. From this point a spacious new carriage-road, 60 ft. in width, has been constructed, and carried to the extreme south boundary. From the entrance of Newcross-gate, along this road, there is an uninterrupted ascent for a distance of about half a mile, when an exceptionally high altitude is attained, with an interesting panoramic view of the metropolis, both north, east, south, and west. It is on this spot, which is the highest point of the estate, that the new schools stand.

The new buildings, which are to be called "Aske's Hatcham Schools," occupy, with the grounds, about four acres. The style of architecture adopted is the Gothic, and as the two schools are uniform both in their dimensions and architectural character, a description of one is sufficient. The girls' school is situated at the north-east side of the site, and that for the boys at the south-west angle. The principal frontage of the boys' school is that to the west facing the new road already mentioned. It contains the ground-floor and story above, and is surmounted by two gables, carried to a height of 50 ft. The length of the elevation is 78 ft., whilst, in addition, at the extreme south-west angle is a caretaker's apartments. The main face of the several elevations consists of stock-brick, with red Suffolk brick for the window-arches, and Boxground stone for window-sills, springers, copings, and general dressings. At the north-west angle of the grounds there is a porter's lodge, and within the grounds two separate buildings, containing the residences of the head-master and head-mistress, all harmonising with the school buildings. The interior of the schools, on the ground-floor, contains the general public school-room, 55 ft. long, and 28 ft. wide. This apartment is 22 ft. in height, and contains an open trussed roof, stained and varnished. The ground-floor also contains five class-rooms, two of which are 15 ft. by 12 ft.; one 20 ft. by 18 ft.; one 19 ft. by 13 ft.; and one 24 ft. by 15 ft., together with a hat and cloak room, 20 ft. by 18 ft. The first-floor also consists entirely of class-rooms,—five in number,—of similar dimensions to those just named. In the grounds attached to each school there will be a covered playground, sup-

ported on iron columns, 80 ft. long by 30 ft. wide. Mr. W. Snooke, the Haberdashers' Company's architect, furnished the designs for the schools, which are being carried out by Messrs. Perry & Co., under the superintendence of Mr. George March, as foreman of the works.

It may be added that in addition to the two schools in progress, the Haberdashers' Company are immediately about to erect a large church on the estate, on the side of the road directly opposite to the principal frontage of the boys' school, and they are also laying out several roads, diverging from the main road already formed, for the erection of residences of a high character, it being their intention not to permit any houses of an inferior character to be erected on the estate. It is calculated that the large area of the estate will admit of the erection of more than 1,000 houses. The Kent Waterworks Company have already constructed a reservoir on one of the highest points on the estate, which will contain 2,000,000 gallons of water. It is covered over with turf, and portions of the surface are ornamentally planted.

MESSRS. MOODY & SANKEY'S TABERNACLE AT CAMBERWELL.

THE erection of the new "Tabernacle," as it is called, in D'Eynsford-road, near Camberwell-green, for the services of Messrs. Moody & Sankey in South London, was commenced last week. The building will be of unusually large dimensions. Its length will be 200 ft. and breadth 167 ft., but it will not be carried to a proportionate height. The side roofs will be much lower than the central portion, the latter being 30 ft. high from the ground, whereas the former will only be 19 ft. The building, which will cover a ground area of 33,400 ft., is calculated to accommodate 7,500 persons. The materials used for the walls of the structure will be corrugated iron, and it will have a slated roof in which there will be skylights, supported by wooden rafters and iron tie-rods. No flooring will be laid down, sawdust sprinkled on the earth being intended to serve this purpose. There will be no galleries, but raised tiers of seats will be covered with red baize. Inquiry-rooms will also be attached to the structure, which is to be completed and ready for opening in six weeks from the commencement of the works. Messrs. Perry & Co., of the Tredegar Works, Bow, are the contractors.

THE BELFAST ARCHITECTURAL ASSOCIATION.

LAST week, the closing meeting of this Association for the session was held in the Museum, College-square North. In connexion with the proceedings, there was an exhibition of drawings and designs, a number of them the work of the students, but for the most part lent for the occasion by gentlemen of the town and neighbourhood. The walls were entirely covered by the designs, and the exhibition was altogether a very interesting one.

On the motion of Mr. W. H. Patterson, Sir Charles Lanyon was called to the chair. Mr. R. M. Young (hon. secretary) read the report of the committee and the report of the examiners, and various awards were made.

Sir Charles Lanyon, in reply to a vote of thanks, said,—It has again given me very great pleasure to preside at your annual meeting, and again to meet those younger members of the profession who are now preparing for the battle of life in that profession of which I was so long a practical member, and upon which I still look with much interest. This meeting recalls many an association connected with my younger days, and the ardour and anxieties connected with the pursuit of knowledge in one of the most pleasing professions that any young man can follow. I must congratulate your association on the improvement which I observe in the exhibition of drawings hung around these walls; and I sincerely hope that this year's success may tend not only to stimulate those who have carried away the prizes in this competition, but that it may lead those who have been unsuccessful to an honourable determination to vie with their fellow-students in the future. To this latter class I would say do not be disheartened. Remember the advice I took the liberty of giving you last year—not in my own words, but in those of a great master of his art, viz.:—"That a great part of a man's life must be spent in collecting materials for the exercise of genius; that nothing can come of nothing; and that he who has laid up no materials can produce no combinations." I fully concur in the observations made in the report of the examiners—"that it is gratifying to notice such a highly creditable show of works, many of them being of real artistic excellence"; and I also concur in the remarks made by them on some of the drawings specially referred to. If I might, however, venture to make an observation on any want there may be in the class of work exhibited, I must say that I should have been better pleased to see more sketches from ruins or buildings of well-known character. These form the materials to which I before referred, which students should be constantly collecting, from which to produce combination of design.

BOROUGH OF SUNDERLAND.

TO ARCHITECTS.

SIR,—The present anomalous position of the profession, as shown by the action taken at the last meeting of the Royal Institute of British Architects, reminds me very strongly of another affair of competition as again offered to the professional world by the Municipal Authority, deputed to a committee of the Sunderland Corporation on this occasion, not for a Town Hall, as they really ought to do, but for "plans, specifications, and estimates for the erection of a Council Chamber and Offices, Museum and Library" at the north end of the Mowbray Park; and to that is added, "only practising architects will be allowed to compete." Marvellous truly! The general conditions issued herewith are, if anything, more astonishing than the ones lately issued for the Scone Medallion, &c., with the extra of being allowed such deviation as any one architect may think best to suit his purpose, though the cost of the whole, including "all the furniture" requisite to embellish the exteriors, flank up the façades, terraces, or main approaches, certainly not the roadways, is not to exceed the large sum of 24,000*l*. Although the site is dotted out without the liberty granted, in that competitors are not bound to conform strictly to the lines of the site, when it is put into feet cubic, at the cost of ordinary street buildings such as respectable tradesmen occupy, it will cost more money by a few thousands of pounds, without the study and after-labour to produce a suite of buildings that will contain such things as are here asked for; and I would, under such peculiar conditions, say to all who may seek for the necessary information this time, consider first the improbability of such a scheme ever being carried any farther than a mere competition, as the last one was nothing more than that, and, for the present one, there really is no better prospect, not a little bit; inasmuch as a very powerful influence is working so as to effectually preserve all the rights of the ratepayers to the entire park in all its fulness of effect, and in all their integrity, as they were expressly handed over to them by her Majesty's late Home Secretary, Sir George Grey, with instructions to maintain, as it is now, and for all time to come, "the extension of the existing Sunderland Park." And I very much regret the necessity there is at this time for prompt action on behalf of the park, and to restrain the town improvement committee from such gross spoliation as is now threatened by them, in determining to cut away the best part of the park, after they have almost uselessly squandered 100,000*l*. in clearing away hotbeds of disease and other ills that life is made subject to through bad management, &c.; but they appear so very indifferent as to acquiring a reasonable site for the proposed suite of buildings that it has become now absolutely necessary to file a bill in the equity courts in order to maintain the park in its entirety, and to that end all the necessary papers are at this moment in London; and I do hope that the town will be spared such an infliction as a warfare in Chancery in order that it may not be called upon, at a not very distant day, to apply for another Improvement Bill. I trust the committee will, by the refusal of architects to compete for the buildings, reconsider their decision, withdraw the affair for the present, and leave the park as it now is; for I think that when intending competitors consider the very great uncertainty of ever seeing their efforts pass beyond the paper upon which they are set forth, however valuable they may be, they will not trouble about dealing with such conditions, or with such further indifferent prospects as to buildings. There is nothing to justify the proposed cutting up of the beautiful piece of land, the extension park; better by far would it be to purchase the public-house and stables forming the north-eastern angle, and inclose the whole as it ought to be: then the town might be pleased in having preserved to them their inheritance, as it is to very many to-day, and then pass it on to future generations as a health-giving place of enjoyment.

I would advise a little more careful digest of the whole scheme, both as to the requirements, character, and probable cost, for whatever the men leading in this scheme of building at this time may think, the time is not far distant when Sunderland must take a much more noble stand in the affairs of the country generally, and show itself worthy to be respected in every way, not only by its own commercial enterprise, but by the mind of its inhabitants, as developed by the public buildings erected, but more especially such town-hall buildings as are requisite and really necessary for protecting those whose duty it is to manage and care for the welfare of the town generally. I do not think the present sum offered a sufficient one to induce good men in full practice to give their time and ideas to assist in developing the requirements asked for; on the contrary, I should have offered the 300 guineas in one good competition carefully arranged, upon a fair prospect of being put into execution, upon a noble site, with broad way up to each façade; for nothing gives more grace and effect to a good design than good approaches; and for that purpose I would suggest that, instead of offering such as has been, and is now, offered, the terms should be,—First, the carrying out of the work at the usual commission of 5 per cent.; the second, 150*l*.; the third, 100*l*.; the fourth, 50*l*.; and a professional umpire to make the award.

This, I submit, would draw men of ability having leisure into a competition; but where there are so many disagreeable uncertainties as there are undoubtedly in this Sunderland affair, I cannot advise any reasonable practitioner to spend his time upon such an uncertainty; neither can I endorse the idea of preventing young men competing, for many first-class men of the present day owe their position entirely to fair competition,—a very rare thing indeed at this time; but much of the odium thrown on the profession, I regret, arises solely from the actions of professional men themselves.

I desire to see a noble town-hall in Sunderland, and I desire to extend the parks, not by cutting away part of the best portions to add more in another place, but by truly conserving what the people have, and adding more as occasions may require it, always observing, "What is worth doing is worth doing well." MARCHIO.

THE LEGAL COMMENCEMENT AND TERMINATION OF A TENANCY.

THE question whether the determination of a tenancy under agreement, the commencement of which is not defined in such agreement, dates from the date of such agreement, or from the date of payment of the rent, has just been settled by the Court of Common Pleas, in the case of Sandill *v.* Franklin.

The facts of the case are as follow:—The tenancy was under a written agreement, by which the premises were "let for a year certain, and so on from year to year, until half a year's notice to quit should be given by or to either party, at the rent of 50*l*., payable quarterly, the first payment to be made on the 25th of March next." The agreement was dated the 20th of December, 1872, and no date was specified for the commencement of the tenancy. Notice to quit was given on the 24th of June, 1874, and the tenant, holding that the notice was invalid, refused to leave and had been ejected. On appealing to the law the verdict was given against him, and he now appealed against that verdict.

The Court of Common Pleas, however, consisting of Chief Justice Coleridge, and Justices Brett, Archibald, and Huddleston, confirmed the verdict, on the ground that the provision as to payment of the first quarter's rent on the 25th of March sufficiently showed that the tenancy was to be considered as commencing from the regular quarter-day, the 25th of December, and not the 20th, the date of the agreement. The half-year's notice to quit, therefore, given on the 24th of June was quite legal.

THE PROPOSED NEW BRIDGE ACROSS THE THAMES.

SHOULD the plan of Mr. Perrett for the construction of a new bridge across the river from the Tower to Horselydown be ultimately sanctioned and carried out, the Thames will have a bridge stretching over it at a considerably higher level above high water-mark than any of the present bridges. The project is at present under the consideration of the Bridge House Committee, but even should it be favourably received by that body, the Admiralty authorities will have to be satisfied before Parliamentary sanction to the project can be expected. Meanwhile it may be stated that the proposals and plans involve the spanning of the river by three arches, each 90 ft. above high water-mark, which, it is stated, will enable the tallest masts of vessels which ever come up to London Bridge to pass under at all times. It is further stated that one of the great advantages of Mr. Perrett's plan consists in the fact that, although the bridge is so lofty, the approaches will be level, which will save much time, as well as suffering to horses. It is likewise urged in favour of this bridge that if allowed to be constructed it would effectually relieve the streets of the eastern portion of the City and neighbourhood, by allowing the large goods traffic caused by the delivery of goods from the docks and wharfs in the locality to be conveyed to the southern district without swelling and almost choking the great stream passing over London Bridge.

ANCIENT CROSSES IN CHESHIRE.

GREAT antiquity is claimed for the "old crosses" at Sandbach, in Cheshire. An account of these crosses has been given by Lyson & Ormerod; they had, as the old story goes, been pulled down and used for walls and grottoes for the houses of tasteful proprietors in the neighbourhood. It is said that they were raised on the same spot where some priest from Northumberland first preached Christianity, and that they were erected in the eighth century. Have any of our readers examined them lately by the light of modern knowledge of this class of antiquities?

ENLARGEMENT OF THE LIVERPOOL FREE LIBRARY.

The Mersey Docks and Harbour Board have just been adjudged to pay a large sum of money in rates as to which they had denied their liability. At the last meeting of the Town Council, Mr. Picton, the chairman of the Library and Museum Committee, stated that the Committee proposed to appropriate that sum in the erection of a new reading-room. He observed that the Walker Art Gallery was rapidly approaching completion, and would form a very handsome addition to the fine buildings in the locality. Between the Free Library and the Walker Art Gallery there was a piece of land which had always been viewed as a site for a new reading-room, which, at the present time, was much required. He said the Committee proposed to erect a circular reading-room, and they would shortly lay the detailed plans before the Council. The feeling of the Council appeared to be unanimously favourable to the project.

THE ANTIQUITIES OF WARWICKSHIRE.

In connexion with the Archæological Section of the Birmingham and Midland Institute, Mr. H. M. Bloxham read an address on "Antiquities of Warwickshire. Mr. S. Timmins occupied the chair. In course of his remarks, the lecturer said that the sites of Roman fortified positions were Tottenhoe, Chesterton, Oakley Wood, Wassenbury, and Ipsley. Ancient British and Roman camps should not be confounded with those moated areas which were scattered over the kingdom, and of which there were probably not less than 100 in Warwickshire. These areas, he was of opinion, had been formed for defensive purposes in the reigns of Stephen, John, and Henry III., when intestine wars prevailed. Sir William Dugdale spoke of Oldburie, near Atherstone, as being a place of great antiquity, and as having been the site of a British fort which was altered by the Romans. At Edghill a sword of brass and a battle-axe had been found, and at Sawbridge, in the year 1869, some Roman urns, of gray earth, curiously polished, had been accidently brought to light. He (the lecturer) had been present at the opening of an ancient British tumulus or barrow near a fortress at Oldbury, and the result of nearly twelve hours' labour had been the discovery of the boss of a shield and a spear-head, both of iron and greatly corroded, as well as vestiges of a secondary and Anglo-Saxon interment of probably the fifth century. On getting to the bottom of the barrow, and placed on the surface of the natural soil, were more than one sepulchral urn accompanied by drinking-cups and a small bronze dagger. He had in his own possession one of the sepulchral urns, though in a very friable condition, one of the drinking-cups and a portion of another, and the bronze dagger. When the London and Birmingham Railway had been constructed in this county, about forty years ago, a tumulus had been cut through near the Brandon Station. This contained an ancient British sepulchral urn broken in pieces. There were, besides, three drinking-cups, of which he himself possessed two. At Long Itchington an ancient British urn, now in the museum at Warwick, had been found some years ago.

"OBITUARY," OR "DECEASED," 1874.

A correspondent noticing that these headings are omitted in the index of our volume for 1874, sends the following list, in order that it may appear in the index of the present volume. We willingly comply with his request:—

V. Baltard, 66; Sir John Benson, 883; R. W. Billings, 983; John Henry Foley, R.A., 941; John Grantham, 623; George Gutch, 1003; Sir Edwin Landseer, R.A., 43, 454; Sir John Rennie, 773; John Roe, 250.

THE SHAFT AT THE PUMPING STATION, GROSVENOR ROAD.

A reader asks us to let him know the height and dimensions of the shaft of the Pumping Station, Grosvenor-road, Pimlico. According to the lithographed drawings which were issued by the Board, the height of the shaft from the ground, exclusive of railing, is 172 ft.; the bottom footing (18 ft. below ground), is 29 ft. square; on concrete, 11 ft. deep; the width at ground level is 20 ft. square, and 15 ft. square at top.

ELECTION OF DISTRICT SURVEYORS.

At the meeting of the Board of Works last week, the following candidates were before the Board:—Messrs. A. Allom, T. Blashill, A. Bovill, J. Clarkson, H. H. Collins, B. Fletcher, J. W. Forge, C. A. Gould, J. Hebb, J. Hewitt, R. C. James, L. Karslake, G. O. Lane, G. Landsdown, W. C. Leonard, H. Lovegrove, F. R. Meeson, R. P. Notley, A. Payne, J. S. Quilter, R. Richardson, L. W. Ridge, T. Roger Smith, T. C. Sorby, A. R. Stenning, F. Todd, J. G. Turner, F. Wallen, T. W. Willis, J. Young. The following were elected:—For the district of East Newington, Mr. G. Lansdown. For the district of West Newington and part of Lambeth, Mr. B. Fletcher. For East Hackney (North), Mr. F. R. Meeson. For East Hackney (South), Mr. C. A. Gould.

MEMBERS' NIGHT:

ARCHITECTURAL ASSOCIATION.

All the doings at the general assembly of the members, in the character of human creatures, must not of course be chronicled. One may, however, divulge that the proceedings savoured strongly of Bohemia, intentionally more so than in the old days of this custom, and not wisely, as some think. Voices, sketches and cartoons, music out of instruments, Japanese paintings, and fragrance from many an advocate of thurification, filled in the programme at the foot of Mr. Tarver's clever allegory in pen and ink. Surely, though, the lusty Architecture is not herself quite so out of sorts as she looks there, and the Institute might have been figured with a little better taste. However, "all's fair at Fairtime." Have your laugh out and take your ease, gay spirits! Conventionality and an unappreciative world may make these more difficult by-and-by.

TOWN SURVEYOR FOR CIRENCESTER.

Sir,—I send you report of a meeting of the authorities at Cirencester for the purpose of electing a surveyor and inspector of nuisances, by which you will perceive for those offices there were sixty-seven candidates, and amongst them several professional gentlemen of excellent standing as engineers, architects, and surveyors. Notwithstanding this, a gentleman is chosen by one section of the united Board simply because he is intelligent and of business habits. As a ratepayer, I protest against the election of such a man. How on earth can he be competent to give an opinion respecting the strength of walls and timbers of buildings, which, as town surveyor, he would frequently be called upon to do, when actually he would not understand a drawing if put before him? And as to making one, or taking levels for drainage purposes, such work is entirely beyond his capacity; and yet you will perceive by the report that he is proposed and seconded by two intelligent men, simply because he possesses good business habits. Doubtless, as a relieving officer, he has filled that situation with credit; but does that qualify him to become a surveyor? If so, there are thousands of good business men quite as well qualified. I say, to make such a selection is a burlesque upon professional men, and useless to the town.

Ratepayer.

THE TENBY COUNCIL AND THEIR ENGINEER.

Mr. W. Burns sends us an account of the treatment he has received at the hands of the Tenby Town Council. If the account be correct, Mr. Burns could certainly recover from the Town Council; if it be not correct, it would be waste of space to print it.

Improved Dwellings.—We learn from a pamphlet that Mr. John Ellis, builder, has erected in Wheatland-lane, Seacombe, a block of six houses, which are intended as dwellings for working men and their families. They are built in hexagonal form, and the object sought by the adoption of this system is to provide healthy and convenient dwellings, at the same time affording greater remuneration for a lesser outlay to those investing in this class of property than houses built on the ordinary principle. Each cottage contains one living-room, two bedrooms, scullery, pantry, coal-place, and small gardens. The rent of each cottage will be 5s. 6d. a week, which will cover the payment for water and all rates.

THE MINE UNDER THE GREAT WESTERN RAILWAY AT WEDNESBURY.

The alarming statement that a portion of the Great Western Railway, near Wolverhampton, was so undermined by colliery workings that it had subsided to a considerable extent, and that trains, though travelling at a foot's pace, were actually inclined to a considerable angle in consequence, has been made the subject of a Parliamentary Paper, which throws full light on the facts of the case.

It appears that the workings in question are in the thick or ten-yard seam of coal, which lies at most about 80 ft. below the surface of the railway. The coal is worked on both sides of the railroad, but not actually under it, though headways and borings have been made for the purpose of ascertaining the quality and extent of the coal.

The railway passes over the locality on an embankment and a viaduct, and the fear is that either or both of these, being undermined so close to the surface, may actually give way. The top of the embankment is about 20 ft. above the level of the ground, and about 80 ft. above the top of the seam of coal, which seam may be taken at about 8 yards thick as an average thickness, in some cases attaining to 10 yards.

This seam has been worked to some extent on the western side of the railway during the last two years; but as only a horse-gin has been used for raising the coal, the progress of the work has been necessarily slow; consequently, the usual subsidences and crownings-in of the surface have come on gradually, and the surface-damage thus caused has been comparatively limited.

Besides the embankment, there is a viaduct which carries the railway over the river Tame, the foundation of the abutment wall of which actually rests on or in the seam of coal itself. The workmen exploring under the walls of the viaduct are in danger of being crushed by the structure, which is liable to be completely undermined, and to fall almost at any moment if the workings are continued. On the remonstrance of the Inspector of Mines, the works in the spot were discontinued; but the danger still exists, though in a less degree, of the railway being affected by the lateral subsidence which is likely to take place, even if no working immediately under it, or in contiguity to it, is carried on. A certain subsidence, or "crowning in," has already taken place close to the embankment, and as these sinkings of the surface occur suddenly, without warning, the danger is such that no precaution could avert in the event of the workings being carried actually under the railway.

The liability of the owner of the colliery to carry on his workings in such a way as not to injure the railway seems evident; but a responsibility would none the less attach to the railway company if any accident were to occur.

Whether or not this is the only instance where railway trains are passing over ground which is honeycombed by colliery workings is very doubtful. But it is well that public attention should be directed to the matter before any serious casualty occurs. Dr. Kenealy's volcanoes are, we venture to think, far less serious matters than the hidden dangers which lurk under our apparently secure and solid railway embankments.

TRANSMISSION OF SOUND.

Sir,—I shall be very glad if you will allow me, through your columns, to ask your numerous readers how I can stop sound from passing from one room into another or others, all on one ground-floor? The case is this:—Connected with a chapel that I attend are five or six vestry-rooms, each about 16 ft. square. They all abut on one passage, from which all the doors open into the separate rooms. The windows are at the opposite side of the rooms, and open into the outer air. The dividing walls are 9-in. brick, the walls between the rooms and passage 4½-in. brick. All the walls in rooms and passage are rendered in Portland cement up to 4 ft. from the floor; above that in lime and sand, finished with the handfloat same as the cement. The building is almost new, and seems to be well done. The room floors are wood; that of passage, tiles laid on concrete. Three or four of these vestry-rooms are used on some evenings at one and the same time for separate classes. The separate singing from each of these rooms (always different tunes) may be heard simultaneously in either of the other rooms. The mixed melody produced is something really shocking, as any one may imagine.

I have no doubt whatever but that there are many other of the new places of worship suffering from the same difficulty. No doubt some of your practical readers have met with cases similar to this, and can tell me how they managed to destroy the effect complained of here. If they will give the result of their efforts, I think it will be a great advantage, and valued by many others besides

J. C.

VENTILATION.

SIR,—Having just read your further article on Mr. Tobin's principle of ventilation, and having also to-day received a circular from him that his interests are about to be transferred to a company, I cannot well refrain from writing (much as I wish him success) that I fixed in the Stock Exchange at least ten years ago, and in another building earlier still, such pipes as he proposes. They are not in walls, but free and up through the floor, vertical, uncovered, pointing to the ceiling expressly to avoid draught.

You are, of course, correct in supposing that when the outer air is warmer than the inner (as it is sure to be if drawn from the South or West in summer), the current would be sluggish; and, following your further remarks, if the demand for the fresh air and its consumption by people and gaslights should be sudden and great, not only is it necessary to have artificial outlet power, but inlet also. For these purposes, in the Stock Exchange checking and settling rooms, I have applied heat to the exhausting shafts, and connected the air-tubes (including the old vertical tubes) with a steam-engine fan for use during the busiest hours; at other times they act naturally.

JOHN J. COLE.

DEFENCE OF LOCAL SELF-GOVERNMENT.

SIR,—My defence of local self-government, which appeared in your issue of the 20th of March last, has placed me somewhat in the position of the mover of a resolution who has the right of reply, but has only heard all round him the echo of his own sentiments; for the numerous local press, and a portion of the daily press, have copied from your columns (some without even the courtesy of an acknowledgment), and have elicited from their readers favourable criticism of my attempt to put the question practically before the public; the only exceptions being a few who appear unable to rise beyond local and personal prejudices. With such I have nothing to do. Mine was the evidence of a public servant whose observations extended beyond twenty years, and I dealt with all those practical points of detail which would be appreciated by your readers, and was written only with a view to dispelling incorrect notions or prejudices that have naturally arisen from the misrepresentations of a few interested persons.

I find that there is one point upon which there is wide-spread error still existing, but which at the time of my first addressing you appeared of minor importance, and that is, the obligation, or rather the power of the Vestries, to cleanse footways, especially in winter times. The subject has grown into greater importance by reason of the manner in which the Home Secretary insinuated neglect on the part of the Vestries to carry out the provisions of the law, when his querist directed attention specially to the neglect of the police. Sir William Fraser did not allow his hatred to Local Government to override his judgment in reading the provisions of the Police Act, the general neglect of which I pointed out, but Mr. Cross diverted the attack rather than admit that Central Government had been guilty of failure.

I assert that the vestries are not bound to cleanse *every* footway, and that the evident intention of the Legislature was, that they should not do so; for it is provided in the 117th section of the Metropolis Local Management Act, 1855, that they should "cause *any* footway within their district to be cleansed." Now, sir, this was passed in order to give the vestries the power to cleanse any footways where the provisions of the Police Act could not be enforced, such as in front of public buildings, vacant land, enclosed gardens, and intersections where it would be difficult to prove a beneficial occupation (and such footways the vestries do cleanse); then the section continues, *as if to prevent any misinterpretation of its meaning*, "but this enactment shall not relieve any occupier of any house or building, or any company whatsoever, from any liability to scrape, sweep, or cleanse, or cause to be scraped, swept, or cleansed, any part of any such footway or from any penalty for neglect so to do." What can be more clear, and yet how much misrepresented have been the facts?

I omitted to mention in my first letter, among the further tokens of confidence reposed in the vestries by the Legislature, is the power of selecting the various Boards for management of cemeteries, baths and washhouses, and for assessment, all steadily pursuing their functions in a manner that can only be realised by those who cherish the principles in defence of which I offered the evidence of

A PAROCHIAL OFFICER.

IMPROVEMENTS AT WOODSIDE FERRY, LIVERPOOL.

DRAWINGS for improvements at Woodside Ferry, have been prepared by Messrs. W. & J. Hay, architects. The first object achieved is the utilisation of the vacant land at present used by the Hoylake Tramway, and this has been skilfully effected by lifting the tramway to a higher level over a terrace of shops, or rather over the back-yards to these shops. On the land at present occupied by the terminus of the Hoylake Tramway it is proposed to erect twenty shops, each measuring 15 ft. wide, by 31 ft. in depth, with a back-yard 15 ft. by 10 ft., and a common passage running behind all 6 ft. wide. These shops will have, according to the design, a mezzanine story over them to serve as storerooms or small offices as may be required, and are further constructed so that two or more may be thrown into one. At the east end of the terrace a clock-tower is introduced, which will be seen from a considerable distance all round about. Beyond the tower, on that portion of the land which lies immediately on the north side of the Ferry pay-gates, and at present inaccessible, is shown a suite of public salt-water baths.

LIABILITY OF BUILDERS.

HIRING CARTS.

IN the Durham County Court, Mr. Patterson, a farmer, sued Mr. Rutter, contractor and builder, for compensation for damages done to three carts under the following important features as regards the hiring of carts.

In 1873-74 the defendant had an extensive contract to build houses at Beaupark Colliery, and he hired of the plaintiff three carts, which were used for leading stones, brick, lime, or anything. The carts, it was stated, were in good repair at the time of hiring, and when returned were much damaged. The bodies of the carts were completely done up, but the wheels were good. The vehicles were made eighteen years ago, and the cost of repairing was 11*l.* 7*s.* 3*d.*, which was now claimed. Mr. Marshall, solicitor for the contractor, said he could not deny that the defendant was a gratuitous bailee. His client had offered 5*l.*, but this was refused. The repairs done to the carts were more than was necessary, and the sum was excessive. The judge ruled that builders were liable, under the circumstances, to make good the damages done to carts, and found a verdict for the plaintiff, with costs.

LIABILITIES OF SURETIES.

HAWKINS *v.* ALDERSHOTT SCHOOL BOARD.

THIS case was tried in the Rolls Court before the Master of the Rolls:—

Adopting the *Times'* report, it seems that by contract in writing, dated the 24th of January, 1873, James May, a builder, agreed with the Aldershott School Board to erect a school for the sum of 2,365*l.*, in accordance with a specification which provided that the whole of the work should be completed and the building ready for occupation by the 26th of July, and, in default, that the School Board should be at liberty to deduct from the amount of the contract, and from any money due to the contractor, the sum of 2*l.* for every day during which the completion of the building might be delayed; that the contract price should be paid by instalments; that each instalment should be liable to all deductions and forfeitures named in the specification; and that such deductions should be set off against each instalment. On the same day the plaintiff, James Hawkins, signed a bond for 500*l.* as May's surety. May having fallen into difficulties, and being discharged by the architect, Hawkins proposed that Messrs. Martin, Wells, & Co., builders, should be employed to finish the job, and the School Board passed a resolution that "they saw no objection to the arrangement, provided all the rights and claims of the Board, as stated in the surety bond, be not interfered with." Accordingly, by a contract in writing, dated the 6th of August, 1873, Martin, Wells, & Co., agreed with the School Board to finish the work for 2,365*l.*, exclusive of the value of the work done and the materials left on the ground by May. As the work progressed, payments were made by the School Board to the new contractors, without any deduction, on the architect's certificates; but on the occasion of the final payment in January, 1872, a considerable reduction was made in respect of several items of expense incurred by the Board in consequence of the building not being ready for occupation by the stipulated time. Having thus settled accounts with the new contractors, the School Board, in April, 1874, claimed of Hawkins the sum of 198*l.* as penalties for the non-completion of the contract by the 26th of July previously, and on his refusal to pay brought an action on the bond. Hawkins thereupon filed the present bill, praying that it might be declared that his liability upon the bond ceased upon the School Board's settling accounts with the contractors, and that the bond might be delivered up to be cancelled, and the defendants restrained from suing thereon.

Mr. Southgate, Q.C., and Mr. Dundas Gardiner were for the plaintiff; Mr. Roxburgh, Q.C., and Mr. W. W. Cooper for the School Board.

The Master of the Rolls, in the course of his judgment, said the conduct of the defendants had been as unjust as it was inequitable. The meaning of the building contract was that at the time of paying each instalment all penalties then due were to be deducted from it. By charging the substituted contractor with a sum of money in the nature of liquidated damages for breach of contract the School Board had deprived themselves of the right of suing for the penalties. Even if they had not done so by paying the instalments without any deduction, the School Board had varied the contract to the prejudice of the surety, and thereby released him from his liability under the bond. There must be a decree for the plaintiff, and the School Board must pay all the costs of the suit.

ARCHITECTS' ACTIONS.

ON Monday last, in the second Court of Exchequer, sittings at *nisi prius*, before Mr. Baron Cleasby and a Middlesex common jury, in the case of Searle *v.* Marshall, a question of interest to architects and builders was raised as to a custom alleged to obtain in the former profession. The action was brought by the plaintiff, who is an architect and surveyor at Tottenham and Enfield, to recover amount of pecuniary compensation from the defendant for work and labour done and professional services rendered in preparing plans, &c., for proposed new warehouses in Old-street, St. Luke's. The pleas were, never indebted. Mr. William Grantham, M.P., was counsel for the plaintiff; Mr. Glyn for the defendant. The plaintiff, in examination by his counsel, stated that he had prepared the original drawings according to the usual custom, and they were submitted to the defendant, who approved of them. The defendant wished to have that part of the drawings relating to the roof to remain in abeyance until he should see how he would get on with the whole building. The defendant desired to make use of the adjoining wall, and the plaintiff advised him that it would be necessary he should first obtain the consent of the owner of that wall before he made use of it; but Mr. Marshall replied that he knew the gentleman so well that he would not have any difficulty in that respect. The difficulty with regard to the roof was, that the defendant was desirous of having a tar asphalte; but witness reminded him that the Metropolitan Building Act would interfere and prevent his carrying out this design. 1,800*l.* was the estimated cost for the proposed building. The defendant afterwards did not carry out this building, and not having paid plaintiff's charge for his professional services, he sent him in a bill for 12*l.* 12*s.* in November, 1874. The copy of this account showed that the sum named was charged for making a preliminary survey of the site of the intended building, and for several interviews with defendant at his own request. Witness applied for the drawings, but he had to wait a considerable time before he got them. Soon after he sent in his bill for the work done; but he had not received the 12*l.* 12*s.* He had charged 1½ per cent. on the estimated cost for the building, which was the usual amount charged by architects.

Baron Cleasby.—But this work was not carried out.

The witness said that 1½ per cent. was the customary charge made by architects on the approximate estimate for the work. For the work already done by him he would be entitled to 2½ per cent., but had only charged half that amount. For work of this kind architects were entitled to claim 5 per cent., apportioned in this manner:—1½ per cent. for preliminary drawings and survey of the site; 1½ per cent. for general drawings, with specification; 1½ per cent. for detail drawings; and 1½ per cent. for superintendence. In the present case the work, in respect of the first two items, had been done, and the witness considered he was justified in making his present demand, which was only half the sum he could legally charge.

Baron Cleasby.—If you had supplied the specifications, and the work had been completed, you would, I suppose, be entitled to charge the full 5 per cent.?

The witness answered that, for the survey of the site and the preliminary drawings furnished, he could claim 2½ per cent. on the proximate estimate or cost for the building proposed to be erected.

Baron Cleasby.—But the superintendence of an architect would not be required here, as there was really nothing to superintend.

Mr. Grantham.—He has not charged any item for superintending.

Baron Cleasby.—Did you give the defendant an estimate?

Witness.—I did, my lord. The amount was, 1,800*l.*, and upon this sum the per-centage is charged. The defendant directed me to make the estimate. I did not put the estimate in writing. It is customary to give it to a client sometimes verbally.

In cross-examination the plaintiff said that it did not matter whether the intended building was abandoned or not, the custom of the profession justified the architect in demanding 2½ per cent. from his client for making the survey of the site and preparing preliminary drawings; but in this instance plaintiff charged 1½ per cent. only, as he wished to retain the custom of Mr. Marshall, who, he expected, would prove a good customer, as he had a good deal of building work in contemplation. A reduction might be made on the architect's charges in cases where the estimated cost for carrying out the buildings was likely to be large.

The counsel for the defendant asked the plaintiff if he would be entitled to charge 2½ per cent. as commission in cases where he had prepared plans and sent in an estimate, say for 1,800*l.*, but that afterwards it turned out the proposed work could not be carried out for that amount?

Mr. Searle said that in that and other hypothetical instances put by counsel he would be entitled to demand the percentage named.

Mr. Glyn.—Even if you were wrong as to the estimated cost for the work?

Mr. Searle.—That might afterwards be a question of law.

Mr. Donald Campbell, architect and surveyor, gave corroborative evidence as to the existence of the custom spoken to by Mr. Searle in the architectural profession, of charging 2½ per cent. on the estimated cost of a proposed building,—half the sum for survey of site, and the other 1½ per cent. for preparing preliminary drawings,—

even in cases where the buildings were not carried out, but abandoned.

In the result, the jury found a verdict for the plaintiff, believing that the existence of the usage or custom alluded to had been established to their satisfaction.

Miscellanea.

Yorkshire Exhibition of Arts and Manufactures at Leeds.—This will be open from May to September, and will be inaugurated by H.R.H. the Duke of Edinburgh on Thursday, May 13th, 1875. It will be held on the site of the Coloured Cloth Hall and land adjoining, close to all the railway stations. The floor space of the exhibition covers an area of 1¼ acre. The central hall of the exhibition is named the Edinburgh Hall, in honour of the Duke of Edinburgh's visit to Leeds. It is 186 ft. long, 98 ft. wide, and 75 ft. high, and is supported on forty pillars, with circular ribs to support the roof. These pillars and ribs are constructed on the "flitch" system, introduced by the late Colonel Fowke in the western annexe of the International Exhibition of 1862,—a form of construction which permits the use of standard shapes and lengths of timber, without destroying its value for ordinary uses afterwards, if the building be taken down. Although practically in one span, the effect of the hall is that of a nave with side aisles. It has been designed and carried out by Mr. Bakewell, architect, of Leeds. The contractors were Messrs. Whiteley & Co., builders, also of Leeds. At the west end of this hall a commodious orchestra has been erected, on the best models for giving the conductor full command of every performer. On the south side of the hall will be arranged some attractive aquaria, one being 80 ft. long, with choice fish, water-plants, &c. There will also be a large aviary with richly-plumed birds, contributed by Lieut.-Col. Child. The north side of the hall will be devoted to various musical instruments, including pianos, upon which recitals will be frequently given.

Artisans' Discussion Meetings.—On Wednesday night last week, a discussion meeting was held at the Artisans' Institute, Castle-street, Upper St. Martin's-lane, when the following question was debated:—Technical Education in its Relation to Wages and Profits. Mr. T. Brassey, M.P., presided. The discussion was opened by Mr. G. Savage, die-sinker. The technical education of the working classes he thought was emphatically a question concerning our national prosperity. He thought a Royal Commission on the subject would be very advantageous, and that little or nothing could be done in the matter till the question was taken up by working men. Mr. Conolly spoke especially of the value of drawing. Technical education was an excellent thing, but he thought that a man could not be educated out of the workshop. Mr. Broadhurst, stonemason, also spoke especially of the value of drawing, which was as necessary for the artisan as reading, writing, or arithmetic. He sincerely desired to see every child receiving instruction in technical education. Mr. Hall said, as to trade-unions, that so long as they kept up, or attempted to keep up, a standard of wages, they were bound to keep up a standard of work, which they did not do now.

Discovery of Roman Remains at Folkestone.—A discovery has taken place during the past week in the course of the excavations going on in connexion with the extension of the Cement Works. The workmen who were preparing for the foundations of the new work were surprised to find a rubble wall of about 3 ft. in height, whose top reached within 10 in. of the surface—apparently Roman workmanship. The wall was traced, when it was found to inclose a rectangular chamber, about 12 ft. in width, lying north and south, with an hexagonal one adjoining at the north end. At the point where the chambers join each other is a deep hole, and in the oblong one are a series of short piers about a score in number, each some 8 in. square, and placed about 1 ft. apart. Near was found a jar-lid of red Samian ware, a guttus, or vessel for holding oil, and one or two other small articles.

Freedom of the City to the Astronomer Royal.—At the Court of Common Council, on the 29th ult., it was unanimously agreed that the freedom of the City, in a gold box of the value of 100 guineas, be presented to Sir George Biddell Airy, K.C.B., D.C.L., LL.D., Astronomer Royal, as a recognition of his indefatigable labours in astronomy, and his eminent services in the advancement of practical science, whereby he has materially benefited the cause of commerce and civilisation.

The British Artist.—At the dinner of the Royal Academy, on Saturday last, Mr. Disraeli, in responding to the toast of "Her Majesty's Ministers," said,—"What has most distinguished of late years the English school is the faculty of imagination, and the English artist has developed that faculty under very great disadvantages. The British artist is not blessed with the inspiration of atmosphere. He is not surrounded by the splendour of nature. He does not dwell in cities glittering with symmetry beneath purple skies. He is not surrounded by human beings whose flashing forms and picturesque gestures stimulate his invention and afford him many a happy hint of expression and of grace. For him no bannered processions, parading with pomp the squares and streets of fair cities animate his fancy, amid the fall of fountains and the carolling of sacred bells. He lives in a studio often invaded by London fog. If he goes forth for relaxation he wanders in streets of hideous monotony. His studies from life are the constable and the cabman. Instead of a procession he encounters a blockade of omnibuses, and instead of bursts of melody he is welcomed by the screaming of the underground railway, and by the hideous concert of organs and hurdy-gurdies. And yet this man, by his imagination, and by that divine gift alone, can give us a canvas breathing with human passions in scenes of romantic loveliness, with every accessory of splendour and of grace."

Hydrants in the Metropolis.—Considerable discussion took place on the 23rd ult. at the meeting of the Metropolitan Board of Works, on a recommendation of the Works Committee, that the sub-committee, which had been appointed to consider the subject of the adoption of hydrants for the purpose of extinguishing fires in the metropolis, should be authorised to visit Manchester and Liverpool, with a view of obtaining more definite information as to the arrangements in force there with reference to the using of these instruments. Mr. Richardson, who moved the adoption of the foregoing, defended the action of the Board in employing fire-engines. He said that, even had they agreed upon using hydrants, it would be a question whether the pressure of water in the mains would be sufficient for their purpose. At present they were spending some 60,000*l.* or 70,000*l.* annually upon the fire brigade, and if they had to expend some 30,000*l.* or 40,000*l.* more on hydrants, the amount of cost for extinguishing fires might soon be in the proportion of 1s. to every 6d. of property destroyed. Captain Shaw had said that it would take twelve hydrants for one fire, and this would altogether involve a distance of some 2,200 ft. apart. Several members contended that an experiment with hydrants could be tried in London at the same cost as a deputation could go to the provinces on the subject. On a division, eighteen were in favour, and fifteen against the recommendation.

The Water Supply of Croydon.—At a Local Board meeting, recently, Mr. Latham, with regard to the report of the medical officer of health upon typhoid fever said to be existing in Croydon, contended that the fever arose from no injurious effects of the water, but from a local radical effect in the drainage, which should be carefully examined. He thought the report should not be made public. Dr. Carpenter contended that foul matter was introduced into the water-service by an intermittent supply of water through the screw-down taps connected with water-closets, and that so long as these were allowed they would have these outbreaks of fever. He believed there were now some seventy cases of fever within their water district, and some seven or eight deaths, and it was the fault of the people, not the Board, that this was the case, because recommendations he had moved some years since had not been adopted. There were perfectly useless dummies in the shape of cisterns set up by the plumbers of this town on purpose to deceive the public. He thought that the report should be made public.

Election of a County Surveyor for Hants.—The Public Works Committee of the County Magistracy met on Wednesday at Winchester to decide on a successor to the late Mr. T. Stopher, deceased. There were a very large number of candidates for the appointment, which is worth 230*l.* per annum. Of these candidates, four—and amongst them Mr. Stopher's son, and for a considerable time the deputy, of the late surveyor—were selected from which to make the final choice, which fell on Mr. James Robinson, of Durham.

The Pollution of the Clyde.—An interesting document, in view of the present inquiry into the pollution of the Clyde, has been issued by the Glasgow authorities, containing a report by the sanitary inspector, and various details with reference to the subject of the impurities that find their way into the river. Mr. M'Leod, in his report, states that the main sewers and natural streams within the city boundary used for drainage purposes measure nearly 100 miles, and these receive and convey in their ramifications through the city the sewage from 101,368 dwelling-houses, and from 16,218 sale shops, warehouses, manufactories, and workshops. These sewers discharge their contents into the Clyde from forty-two outlets, thirty-three of which are below the weir, with two manufactory outflows by private drains,—the one a chemical work, and the other a distillery,—and nine above the weir. In addition to the latter, twenty manufactories discharge their waste outflow by private drains directly into the Clyde.

Important to Builders.—On the 27th ult., at the Middlesbrough County Court, before Mr. E. R. Turner, judge, and a special jury, Mr. Jonathan Ward, jun., sued the Ormesby Local Board of Health for 50*l.* damage done to his property in Stephenson-street, North Ormesby, in consequence of wrong levels having been given to him by Mr. Tidman, their surveyor, while the houses were in process of erection. It was alleged that Mr. Ward got certain plans passed by the Board for six houses, and that when erecting them the levels of the street were incorrectly given to him by the surveyor, the consequence being, that after two years' parley he has been compelled to make certain alterations, for which he now claimed 50*l.* Before any evidence was given, the statute, which compels an action to be taken within six months after the offence, was pleaded. His Honour ruled that the objection was valid, and by his direction the jury gave a verdict for the defendant.

Building Prospects in Wigan.—The Wigan Land and Building Company (Limited) have now completed and thrown open to the public one of the principal new streets on their building estate at the Wigan-lane end of the town. This new thoroughfare is wide, and opens up some of the best available building land in the borough. By way of making a start, the company gave instructions to their architect, Mr. Ford Mackenzie, of King-street, Wigan, to prepare designs for a terrace of houses to be erected on the new street, and contracts have now been entered into with local tradesmen for the immediate execution of the work. A terrace of ten residences, comprising four large houses and six smaller, will be erected forthwith. The building is Italian in style, and the design is pleasing.

The Protection of Buildings from Lightning.—A paper on the above subject was read at the Society of Arts on the 28th ult. by Dr. R. J. Mann, president of the Meteorological Society. The author showed the state of science in regard to the matter, and the way in which buildings could be most effectually and conveniently secured from danger. The principles of the appliances for the conduction of the electric current were described and illustrated by various interesting experiments. In conclusion, he combated the idea that accidents from lightning were of such rare occurrence as to render precaution a matter of trouble and money, by quoting statistics showing that the loss of life and property by lightning was considerable.

Parliament-street.—On the 3rd inst. Mr. Goldsmid asked the First Commissioner of Works, in the House of Commons, whether he had yet made any arrangements for widening the lower portion of Parliament-street; and if not, whether he proposed to do so before next session of Parliament. Lord H. Lennox said the question of providing increased accommodation for certain Government offices in Parliament-street was still under the consideration of the Government, and he had not received their decision on the subject. Should, however, they decide in favour of such a scheme it would be a welcome arrangement to him, as First Commissioner of Works, to widen the lower portion of the street in question.

St. Martin's Church, Lewes-Road, Brighton.—This church, a memorial of the late Vicar of Brighton (the Rev. H. M. Wagner), was opened on the 1st inst. As we are about to give a large view of the interior, we postpone particulars, so that they may appear together.

The Competing Plans for the Annan New Town-hall.—Seven designs have been submitted in competition for the proposed Town-hall for Annan. Three are from Glasgow architects. The local *Observer* states that Mr. Daniel Birkett, Carlisle, sends a plan which differs from all the others in having three floors, one of them being a basement. The elevation is designed somewhat after the Scotch style, and the probable cost is set down at 2,500*l*. A plan sent by Mr. Stephen Shaw, Kendal, was regarded with favour. The structure is much plainer than any of the others, and it contains the largest hall, the size of it being 43½ ft. by 27½ ft. The tower is 90 ft. high and 14 ft. square at the base. The estimated cost is 2,376*l*.

Exhibition of Appliances for the Economy of Labour.—This exhibition, which is being held under the auspices of the Society for the Promotion of Scientific Industry in Manchester, will be opened on May 14 by the Earl of Derby, president of the Society, and the opening address will be delivered by Mr. John Anderson, LL.D., late the superintendent of machinery to the War Department. The exhibition will contain a collection of engineers' tools, wood-working machinery, and other appliances. The second division is devoted to domestic contrivances. A number of gold, silver, and bronze medals will be awarded.

New Church at Bishop Auckland.—The Church of St. Peter, Bishop Auckland, has been consecrated by the Bishop of Durham (the Rev. Dr. Baring). The church fronts Princes and Gibbon streets, and is built on land given by Mr. James Thompson, of Bishop Auckland. The style chosen is Decorated. Internally the building is 113 ft. in length, 37 ft. in width, and 39 ft. from the floor to the top of the ceiling, while from the flags to the ridge-stone it is 55 ft. It is intended to seat about 550 persons. Its total cost, exclusive of the spire, will be about 7,000*l*. Messrs. Austin & Johnson, of Newcastle, are the architects.

New Wesleyan Chapel, Windsor.—The Wesleyan Methodist body, having for some time past felt that the present place of worship in Peascod-street scarcely meets their requirements, have resolved to erect a new chapel. They have secured a site on the Vansittart Estate, at the corner of the Alma and New Roads, and have selected plans prepared by Mr. Morris, of Reading, which were selected by the casting vote of the chairman of the trustees only, in preference to plans submitted by Mr. Byrne, of Windsor. The building, exclusive of site, is estimated to cost about 4,000*l*.

The Opening of Soho-Square to the Public.—It will be remembered that an offer made to the inhabitants of the square by Baron Grant, to lay out the square for the use of the public, provided the property was transferred to the Metropolitan Board of Works, has been declined. A committee, however, has been appointed, and the present dilapidated monument to James Duke of Monmouth will be taken down, new iron railings will take the place of the present worn-out ones, and the grounds will be laid out in ornamental flower-beds, the cost being defrayed by the inhabitants.

Moriendum est Omnibus.—During the past week there has been erected in the churchyard of Castleton, a monument to the memory of Charlotte, the wife of Mr. Willmott Edward. It is of brown Portland stone, 6 ft. 6 in. in height by 3 ft. in width, Gothic in style, the crockets and finials well carved. A sunk moulded panel of white marble bears the inscription. The monument includes also black marble shafts, and stands on a basement of Portland stone. It is from the *atelier* of Mr. W. Dalwood, of Sherborne.

Memorials of the Johnson Period.—The remarkable collection made by Mr. Lewis Pocock, F.S.A., illustrating the life, works, and times of Dr. Samuel Johnson, will be sold by auction next week (May 10th, 11th, and 12th), by Messrs. Messrs. Sotheby & Co., in Wellington-street. It includes most interesting letters by his contemporaries, and forty by Johnson himself, together with some curious MSS., and a large collection of engraved portraits from the works of Reynolds.

Saltaire.—The foundation-stone of Congregational Sunday-schools to accommodate 1,600 children were laid on Saturday afternoon at Saltaire, Yorkshire. The cost, about 10,000*l*., will be defrayed by Sir Titus Salt, bart., founder of Saltaire.

Grand Stand on Carlisle Race-course.—The committee of the Carlisle Race-stand Company are about to make improvements in the paddock. The contract for these improvements has been let to Mr. C. Armstrong, builder, for nearly 600*l*., with the stipulation for their completion by the 25th of June next. The building to be erected will stand on the breast of the bank on the south side of the Turf Hotel, adjoining the Sands.

Brickmakers' Strike in York.—The brickmakers have turned out for an advance of 6d. per 1,000. Bricks are exceedingly scarce, and the strike is creating considerable inconvenience. It is said that the men are also demanding that the masters should manufacture but one-sized brick, namely, the 60 cubic inches. Such a demand would array all common sense against the movement.

Waterworks, Stow-on-the-Wold. — The work undertaken by Mr. Teague to deepen the well, has been completed with satisfactory results, and we hear that gentleman has been paid the amount of his contract, viz., 500*l*. The well is now 140 ft. deep, and on Monday last upwards of 40,000 gallons of pure water were pumped up without showing any perceptible decrease in the supply at the bottom of the well.

Society for the Encouragement of Fine Arts.—A lecture was delivered before this society on the 29th ult., by Mr. Henry Blackburn, on "Art in America." The lecturer dwelt at length on the benefit that would accrue mutually to English and Americans by exportation of English works of art. At the same time Americans should do all in their power to revoke the prohibitive duties at present extant.

Explosion of Sewer Gas.—In the Market-place, Leicester, an alarming explosion of sewer-gas took place late on Saturday night. Several of the stalls in the market were knocked down, and the kerb and paving-stones hurled to a considerable distance by the force of the explosion, which is supposed to have been caused by a lighted match being thrown down a grating. Fortunately no person was seriously hurt, though several passers-by were knocked down.

Opening of a Temperance Hall, at the Lye, Dudley.—The new Temperance Hall, the foundation-stones of which were laid in June last, was opened on the 26th ult. The building is of brick, Romanesque in style. The hall is 66 ft. by 33 ft., and affords ample sitting-room for 500 persons. The cost of the building is 1,000*l*. The architect is Mr. J. M. Gething, of Amblecote, near Stourbridge.

A Sanitary Churchyard.—The Stocktonians will be pleased to know, says the *Darlington Times*, that there is room for 2,000 more of them in Holy Trinity Churchyard, and that with a view to their comfort, the yard is to be thoroughly repaired, and placed in "a proper sanitary condition." How many bodies are at present undergoing decomposition there?

Derby Central School of Art. — The students of this school recently presented Mrs. Cooper, the school attendant, with a purse containing eleven guineas, and a satchel with silver plate, bearing an inscription recognising Mrs. Cooper's kindness and unvarying attention in the five years during which the school has been at work.

Accident at the Festiniog Quarries.—A shocking accident occurred on Wednesday at the Welsh Slate Company's quarry at Festiniog. A portion of the roof of one of the underground chambers suddenly gave way and fell upon a number of workmen, three of whom were instantaneously killed, whilst a fourth was severely injured.

Averages.—The visitors at South Kensington Museum during the week ending May 1st numbered 14,137. The average number of visitors in the corresponding week of former years was 14,515. Who can explain this? Why do not 4,000 go one week and 40,000 another? These differences do not occur, but why do they not?

The Restoration of St. John's Church, Coventry.—A meeting has been held to make arrangements for completing the restoration of this church, and to consider the plans supplied by Sir Gilbert Scott. Sir G. Scott estimates that to thoroughly restore both exterior and interior a sum of nearly 5,000*l*. would be required.

Elsley's Patent Sash Lever.—In schools, hospitals, public offices, and other buildings where good ventilation is required, this arrangement may be usefully introduced. Several sashes may be opened with one action of the lever or handle and fixed in any desired position, so as to regulate the supply of air. The apparatus is in good use in many of the London Board schools.

The Gainer of the First Prize of the London Art Union.—Mr. William Howe, late of Durham, and who for many years was connected with the *Durham Advertiser*, but is now holding a responsible situation in the *Leeds Mercury* office, is the gainer of the first prize, valued at 250*l*., in this year's distribution of the London Art Union.

Discovery of Coal in Kent.—A farmer named Baldwin, of Cranbrook, in Kent, has discovered coal on his farm whilst boring for water. The vein was struck at a depth of 60 ft., and a little lower down a second and thicker vein was reached. The coal is described as of excellent quality.

Sawing Machine.—A special silver medal has been awarded to Messrs. Wurr & Lewis, engineers by the Ayrshire Agricultural Society, for their patent combined circular and band sawing machine, which, with a collection of other wood-working machinery, is now being exhibited at Ayr.

Danger in New Houses. — Dr. Goldie, Medical Officer of Health for Leeds, remarks upon the frequency of scarlatina cases in new houses. This is accounted for by the fact that builders use up old bricks and timber taken from condemned dwellings which have long been the home of dirt and disease.

The Embankment.—This, Saturday, the 8th inst., has been fixed by the Metropolitan Board of Works for opening to the public the new garden on the Victoria Embankment, lying between Whitehall-place and Westminster Bridge.

Lymington Church.—The work of restoring the parish church of Lymington has just been brought to a completion. The total expense incurred has been 1,077*l*. 18*s*. 1*d*.

Extension of the Margate Jetty.—The contract for this work was signed on Monday, and it will be commenced forthwith. The cost is estimated at 25,000*l*.

Michelangelo.—It is stated from Rome that a discovery has just been made of thirty-six documents connected with Michelangelo, of great interest for the history of art.

Holywell.—The School Board have appointed Mr. John Hill architect and surveyor to the Board.

TENDERS

For alterations to the Crown and Cushion, Market-place, Woolwich, for Mr. William E. Reed. Mr. Henry Roberts, architect:—

	Outside.	Bar Fittings.
Raine	£256 0 0	£210 10 0
Williams	239 0 0	210 0 0
Murrin*	237 15 0	207 10 6

* Accepted. Tender for General Repairs, £203. 7*s*.

For alterations and general repairs to the Wheatsheaf Tavern, Kentish-town-road. Messrs. Bird & Walters, architects. Quantities supplied:—

Thompson & Smith	£798 10 0
Harris & Sons	792 0 0
Kelly Bros.	702 0 0
Mark	780 0 0
Williams & Son	763 0 0
McLachlan & Son	745 0 0
Anley (accepted)	739 0 0

For warehouse, Alfred-mews, Tottenham-court-road. Mr. Charles Fowler, architect. Quantities supplied:—

Phillipson	£2,200 0 0
Bangs & Co.	1,808 0 0
Patman & Fotheringham	1,748 0 0
Hobson	1,724 0 0
Stimpson & Co.	1,710 0 0
Scrivener & White	1,609 0 0

For warehouse, Little Love-lane, City. Mr. Herbert Ford, architect. Quantities supplied:—

Killby	£5,536 0 0
Laurence	5,532 0 0
Scrivener & White	5,488 0 0
Hobson	5,409 0 0
Smale	5,393 0 0
Browne & Robinson	5,388 0 0
Perry & Co.	5,339 0 0
Downs & Co.	5,332 0 0
Kirk & Randall	5,279 0 0
Adamson & Son	5,110 0 0
Brass	4,965 0 0

For house at Stapleford, Cambridge. Mr. John Hill, architect:—

Drake's Concrete Building Co.	£2,051 0 0

For warehouse, Addle-street, City. Mr. Herbert Ford, architect. Quantities supplied:—

Laurence	£3,783 0 0
Scrivener & White	3,715 0 0
Browne & Robinson	3,692 0 0
Perry & Co.	3,684 0 0
Kirk & Randall	3,652 0 0
Smale	3,652 0 0
Downs & Son	3,628 0 0
Hobson	3,587 0 0
Adamson & Son	3,504 0 0
Killby	3,459 0 0
Brass	3,318 0 0

For building six almshouses at Grantham, Lincolnshire, for the trustees of the late Mrs. Bradley. Mr. Charles Pinn, architect. Quantities supplied:—

Budd & Son	£1,475 0 0
Wartnaby	1,440 0 0
Challan	1,420 0 0
W. & G. Priest (accepted)	1,300 0 0

For dwelling-house, Southgate. Mr. Thomas J. Hill, architect:—

Field & Son	£1,230 0 0
Fairhead	1,068 0 0
Rist & Brown	1,059 0 0
Sabey & Son	1,020 0 0
Patman Bros.	998 0 0
Bentley	935 0 0

For the erection of Board Schools, residence, &c., at Arlsey, Bedfordshire. Mr. James Shilcock, architect. Quantities by Mr. Henry Lovegrove:—

Sharp & Maxwell	£4,937 0 0
Allpress	3,550 0 0
Nightengale	3,253 0 0
Boyce	3,244 0 0
Moore	3,082 0 0
Stapelton	2,792 7 6
Redhouse	2,533 0 0
Ling	2,525 0 0
Dunham	2,320 0 0
Saint	2,285 0 0
Twelvetrees	2,185 0 0
King (accepted)	1,925 0 0

For alterations and repairs to No. 19, Gracechurch-street, for Mr. S. Hay. Mr. Thacker, architect:—

Boyce	£424 0 0
Langmead & Way	355 0 0

For alterations and repairs at the Green Man Tavern, Harlesden, for Messrs. Fuller, Smith, & Turner. Messrs. Munn & Green, architects:—

Spicer	£410 0 0
Bangs & Co.	393 0 0
Nye	385 0 0
Henning & Son	347 0 0
Wagner (accepted)	339 0 0

For two cottages at Stratford, Essex, for Mr. H. Copland. Mr. George More, architect:—

Cumbers	£715 0 0
Mansfield	635 0 0
Cheffins (accepted)	610 0 0

For works, No. 2, Hampstead-road, for Mr. B. Beach:—

Toms (accepted)	£440 0 0

For stables, No. 1, Leighton-crescent, N.W., for Mr. W. Cowen. Mr. H. R. Cotton, architect:—

Toms (accepted)	£547 0 0

For additions to Nos. 1 and 5, Park Village East, Regent's Park, for Mr. T. A. Castledene:—

Toms (accepted)	£358 0 0

For additions to Ruckley Grange, Salop, for Mr. T. E. Horton. Mr. J. Fogerty, architect:—

Nevett Brothers	£5,954 0 0
R. & J. Millington	5,284 0 0
Foster	5,246 0 0
Horsman	4,997 0 0
Marrion	4,750 0 0
Yates (accepted)	4,597 0 0

For house at Chipstead, Surrey. Mr. R. M. Shaw, architect. Quantities by Mr. C. Stanger:—

Clark & Bracey	£4,196 0 0
Newman & Mann	3,912 0 0
Keale	3,807 0 0
Cooke & Green	3,797 0 0
Nye	3,680 0 0
Batchelor	3,495 0 0
Shearburn	3,490 0 0
Tongue	3,380 0 0
Richardson (accepted)	3,315 0 0

For alterations at 22, Oxford-street, for Mr. Fase. Mr. Lewis Solomon, architect:—

Cohen	£900 0 0
Downs	837 0 0
Patman & Fotheringham*	798 0 0

*Accepted.

For the first portion of the Alexandra National Schools, Penge, Beckenham, for the Rev. W. Cator and Committee. Mr. William C. Banks, architect:—

Larke	£1,391 0 0
Merritt & Ashby	1,333 0 0
Graham	1,326 0 0
Cooper	1,300 0 0

For alterations to Lea Cottage, Malmsbury, for Mr. W. Forrester. Mr. C. J. Phipps, architect:—

Light & Smith (accepted)	£1,220 0 0

For the formation of roads and sewers on the Manor Park Cemetery Company's Estate, at Forest Gate, Essex:

Thompson & Son	£1,850 0 0
Jackson	1,700 0 0
Marshall	1,700 0 0
Bloomfield	1,599 0 0
Clarke	1,437 0 0
Richardson (accepted)	1,300 0 0

For alterations to the brewery of Mr. A. O. Crooke, Hindon. Messrs. A. R. Stenning & J. B. Tyerman, architects:—

Donne	£562 10 0

For additions to the Hargraves, Stanstead, Montfitchet, Essex, for Mrs. Pultney. Mr. G. E. Pritchett, architect. Quantities by Mr. H. S. Benson:—

	Old Work.
Battram & Hayward	£6,296 ..... £125
Holland & Hannen	6,175 120
Grimwood & Sons	5,933 98
Macey	5,610 80
Shepherd	5,600 75
Cook & Green	5,594 95
Wagstaff	5,190 ..... —

For the erection of St. Peter's Parsonage, Mill End, Rickmansworth, for the Rev. C. W. Neild. Messrs. Stenning & Tyerman, architects:—

Woodward	£1,780 0 0
Holland	1,549 5 0
Clifford & Gough	1,464 0 0
Brown (accepted)	1,386 10 0

For the erection of a house, at Godstone, for Mr. Fredk. Stenning and others. Messrs. Stenning & Tyerman, architects:—

Jarrett	£2,150 0 0

For the erection of a lodge to Kingswood House, Shortlands, for Mr. H. Austin. Messrs. Stenning & Tyerman, architects:—

Burrows	£456 0 0
Arnaud (accepted)	442 0 0

For alterations and additions to the warehouse of Mr. R. N. Byass, Limehouse. Messrs. Stenning & Tyerman, architects:—

Woodward	£4,877 0 0
Macey (accepted)	4,296 0 0
Stamp & Bowtle	4,235 0 0

For taking down and rebuilding the premises of the Religious Tract Society, in St. Paul's-churchyard and Canon-alley. Mr. E. Wyndham Tarn, architect. Quantities supplied:—

Jackson & Shaw	£5,160 0 0
Woodward	5,150 0 0
Holland & Hannen	4,930 0 0
Brass	4,894 0 0
Rider & Son (accepted)	4,828 0 0

For warehouse, Jewin-crescent. Mr. J. Wimble, architect:—

Cohen	£5,690 0 0
Bayes & Ramage	4,850 0 0
Newman & Mann	4,835 0 0
Mortar	4,823 0 0
Falkner	4,735 0 0
Hoare & Son	4,690 0 0
Stoner	4,615 0 0
W. & F. Croaker	4,467 0 0

For a house, at Penge, for Mr. N. Pearce. Mr. G. Low, architect:—

Scrivener & White	£1,975 0 0
Symes & Co.	1,956 0 0
Dove Bros.	1,915 0 0
Bowyer & Sons	1,875 0 0
Wagstaff	1,860 0 0
Gates	1,821 0 0
Rider & Son	1,818 0 0
W. & F. Croaker	1,798 0 0
Colls & Sons	1,797 0 0
Marsland	1,785 0 0
Beaker	1,695 0 0

For the erection of bank at Sydenham, for the Directors of the London and South Western Bank. Messrs. Tolley & Dale, architects:—

Amer	£2,292 0 0
Bracher & Son	2,185 0 0
Jerrard	2,137 0 0
Smith	2,071 0 0
Gates	1,968 0 0
Thomas	1,797 10 0

For additions to premises, Dulwich-road, Penge, for Mr. Grant. Messrs. Tolley & Dale, architects:—

Kemp	£1,000 0 0
Amer	860 0 0
Marriage	820 0 0

For additions to Bramhope Lodge, Blackheath. Messrs. Tolley & Dale, architects:—

Gates	£1,875 0 0
Thomas	1,468 0 0
Williams & Sons	1,350 0 0

For additions to Mr. Tilley's premises, Penge. Messrs. Tolley & Dale, architects:—

Marriage	£275 0 0
Masters	197 10 0
Amer	186 0 0

Fencing, &c., Camberwell Cemetery.—Messrs. Dover, Son, & Co. say that the amount of their Tender, and which has been accepted by the Board, is £1,109. 10s., not £815, as stated.

TO CORRESPONDENTS.

A Visitor (cancelled; having appeared elsewhere).—A Bricklayer (in type).—G. G. S. (shall have attention).—S. W. (amount of Tenders should be sent).—E. A.—J. D. H.—O.—A. G.—J. B. R.—W. & L.—D. Son & Co.—W. W. N.—C. W.—L. E.—W. C. B.—A. T.—J. M.—F. G.—F.—J. F.—M. D.—T. B.—H. A. W.—C. J. P.—J. P.—F. B.—R. P. S.—J. H.—J. F.—C. S.

We are compelled to decline pointing out books and giving addresses.

All statements of facts, list of tenders, &c. must be accompanied by the name and address of the sender, not necessarily for publication.

NOTE.—The responsibility of signed articles, and papers read at public meetings, rests, of course, with the authors.

CHARGES FOR ADVERTISEMENTS.

	Situations Wanted.	Situations Vacant.
Six lines (about fifty words) or under ..	3s. 6d.	4s. 6d.
Each additional line (about ten words)..	0s. 6d.	0s. 6d.

TERMS OF SUBSCRIPTION.

"THE BUILDER" is supplied, *direct* from the Office, to residents in any part of the United Kingdom at the rate of 19s. per annum, *Payable in Advance.*

Halfpenny stamps accepted for amounts under 5s. Any larger sum should be remitted by Money Order, payable at the Post Office, King-street, Covent-garden, W.C. to DOUGLAS FOURDRINIER.

Advertisements cannot be received for the current week's issue later than **THREE o'clock p.m.** *on THURSDAY.*

The Publisher cannot be responsible for TESTIMONIALS *left at the Office in reply to Advertisements, and strongly recommends that* COPIES ONLY *should be sent.*

Bath Stone of best quality.
RANDELL, SAUNDERS, & CO. (Limited),
Quarrymen and Stone Merchants.
List of Prices at the Quarries and Depôts; also cost of transit to any part of the Kingdom, on application to
Bath Stone Office, Corsham, Wilts. [ADVT.]

Patent Selenitic Cement, with double the usual sand, is much stronger than ordinary mortar. Plastering finished in much less time at less cost. Excellent substitute for Portland cement for Concrete at less than half its price.—21½, Millbank-street, S.W. [ADVT.]

Societe Francaise des Asphaltes, Limited. London, 27, Cornhill; Paris, 14 and 16, Rue Curial. This Company, possessing its own Mines, which are practically exhaustless, is prepared to guarantee the supply of pure Seyssel Rock Asphalte, for roadways, pavements, skating rinks, &c., and offers great facilities to shippers, merchants, and consumers in general. Works executed by the above Company can be seen in every part of the Metropolis.—Particulars upon application.—[ADVT.]

Asphalte.
Seyssel, Patent Metallic Lava and White Asphaltes.
M. STODART & CO.
Office:
No. 90, Cannon-street, E.C. [ADVT.]

Whitland Abbey Green Slates.—These Quarries are now fully opened out, and are producing Slates in all sizes, and in any quantity: sound, and of choice green tint.—For samples and further particulars, apply to the MANAGER, at the Quarries, Narberth-road, R.S.O. [ADVT.]

TRELOAR & SONS,

Manufacturers of

COCOA-NUT MATS AND MATTING,

69, LUDGATE HILL, E.C.

CORK CARPET, FLOOR CLOTH, LINOLEUM, KAMPTULICON,

And all the new Floor Coverings.